KOMSHILOV, Nikolay Fedorovich; BARDYSHEV, Ivan Ilarionovich, doktor khim. nauk prof., red.; MALEVSKAYA, Sof'ya Stepanovna, kand. khim. nauk [deceased], red.; PRASENTSEVA, Nina Ivanovna, kand. khim. nauk, red.; GORDON, L.V., red.

[Colophony, its composition and the structure of resin acids] Kanifol', ee sostav i stroenie smolianykh kislot. Moskva, Lesnaia promyshl', 1965. 303 p. (MIRA 18:12)

1. Chlen-korrespondent AN BSSR (for Bardyshev).

NIKITIN, Nikolay Ignat'yevich. Prinimali uchastiye: ABRAMOVA. Ye.A., starshiy nauchnyy sotr., kand. khim. nauk; AKIM, E.L., inzh.-tekhnolog; ANTONOVSKIY, S.D., dots., kand. tekhn. nauk; VASIL'YEVA, G.G., inzh.-tekhnolog; ZAYTSEVA, A.F., starshiy nauchnyy sotr., kand. tekhn.nauk; KLENKOVA, N.I., kand. tekhn. nauk; MALEVSKAYA, S.S., kand. khim. nauk; NIKITIN, V.N.starshiy nauchnyy sotr., kand. fiz.-mat. nauk; OBOLENSKAYA, A.V., kand. tekhn. nauk, dotsent; PETROPAVLOVSKIY, G.A., starshiy nauchnyy sotr., kand. tekhn. nauk; PONOMAREV, A.N., kand. tekhn. nauk, dots.; SOLECHNIK, N.Ya., prof., doktor tekhn. nauk; TOKAREV, B.I., inzh.; TSVETAYEVA, I.P., kand. tekhn. nauk; CHOCHIYEVA, M.M., kand. tekhn. nauk; ELIASHBERG, M.G., doktor tekhn. nauk; YUR'YEV, V.I.; KARAPETYAN, G.O., red.izd-va; ZAMARAYEVA, R.A., tekhn. red.

[Wood chemistry and cellulose] Khimiia drevesiny i tselliulozy. Moskva, Izd-vo Akad.nauk SSSR, 1962. 711 p. (MIRA 15:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Nikitin). 2. Zaveduyushchiy kafedroy fizicheskoy i kolloidnoy khimii Lesotekhnicheskoy akademii (for Yur'yev).

(Cellulose)

MALEVSKAYA, S.S.; LYAMTSEVA, Yu.F.; LYAMTSEV, D.T.

Distribution of wood tar in the course of the sulfite cooking of woodpulp. Zhur.prikl.khim. 34 no.11:2533-2537 N '61.
(MIRA 15:1)

1. Kafedra organicheskoy khimii Lesotekhnicheskoy akademii imeni S.M.Kirova.
(Woodpulp) (Wood tar)

MALEVSKAYA, S.S.

Autoxidation of tar acids by atmospheric oxygen. Gidroliz. i lesokhim.prom. 13 no.7:5-7 '60. (MIRA 13:10)

1. Leningradskaya lesotekhnicheskaya akademiya im. S.M.Kirova.
(Wood tar) (Oxidation)

MALEVSKAYA, S.S.

Changes in physiological resin during the production of woodpulp from spruce wood. Bum.prom. 33 no.11:2-4 N '58. (MIRA 13:8)

1. Lesotekhnicheskaya akademiya im. S.M.Kirova.
(Spruce) (Woodpulp)

MALEVSKAYA, S.S.

Tars in spruce wood. Zhur.prikl.khim. 30 no.6:903-910 Je '57.
(MIRA 10:10)

1. Kafedra organicheskoy khimii Lesotekhnicheskoy akademii imeni S.M.Kirova.

(Wood tar) (Spruce)

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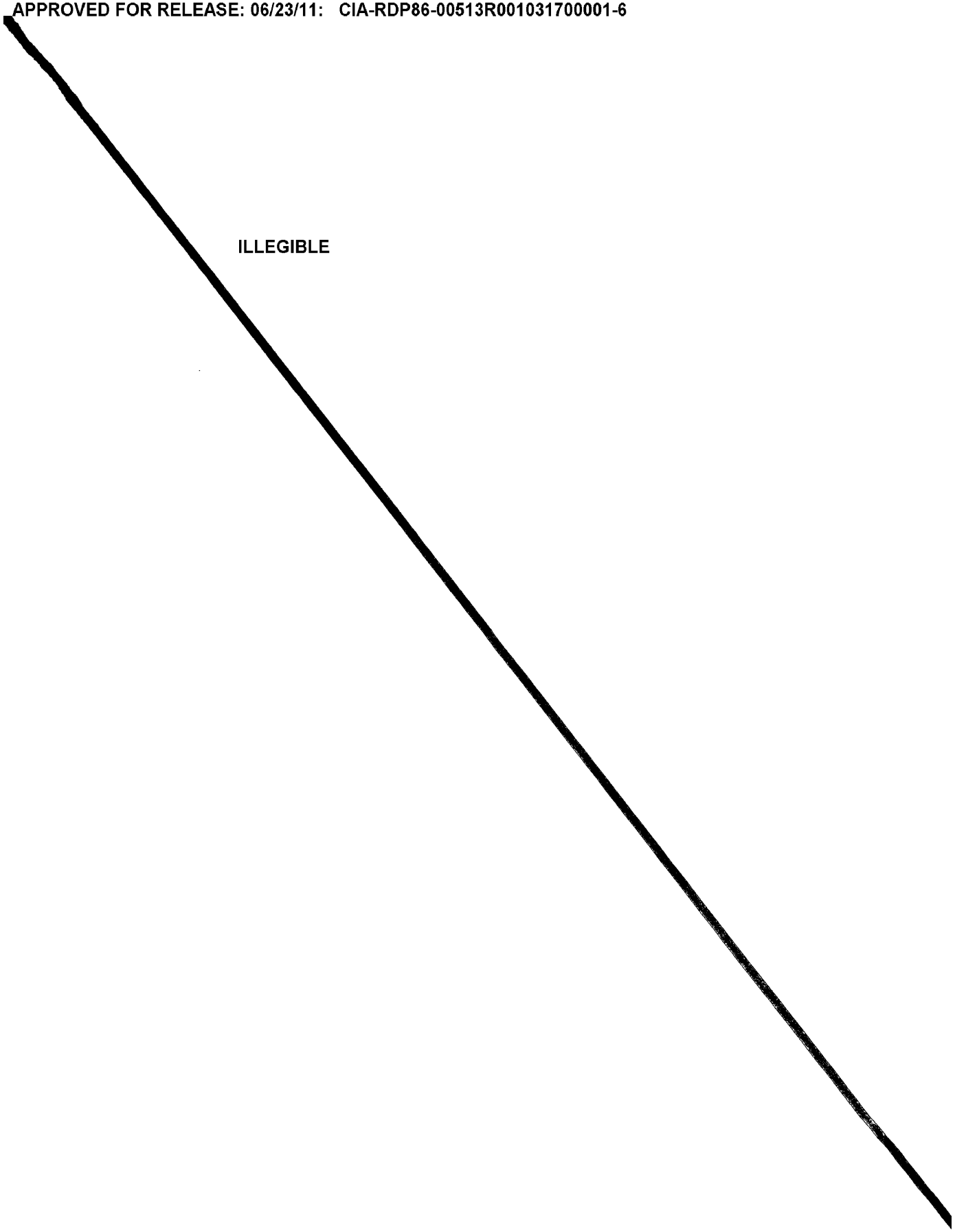

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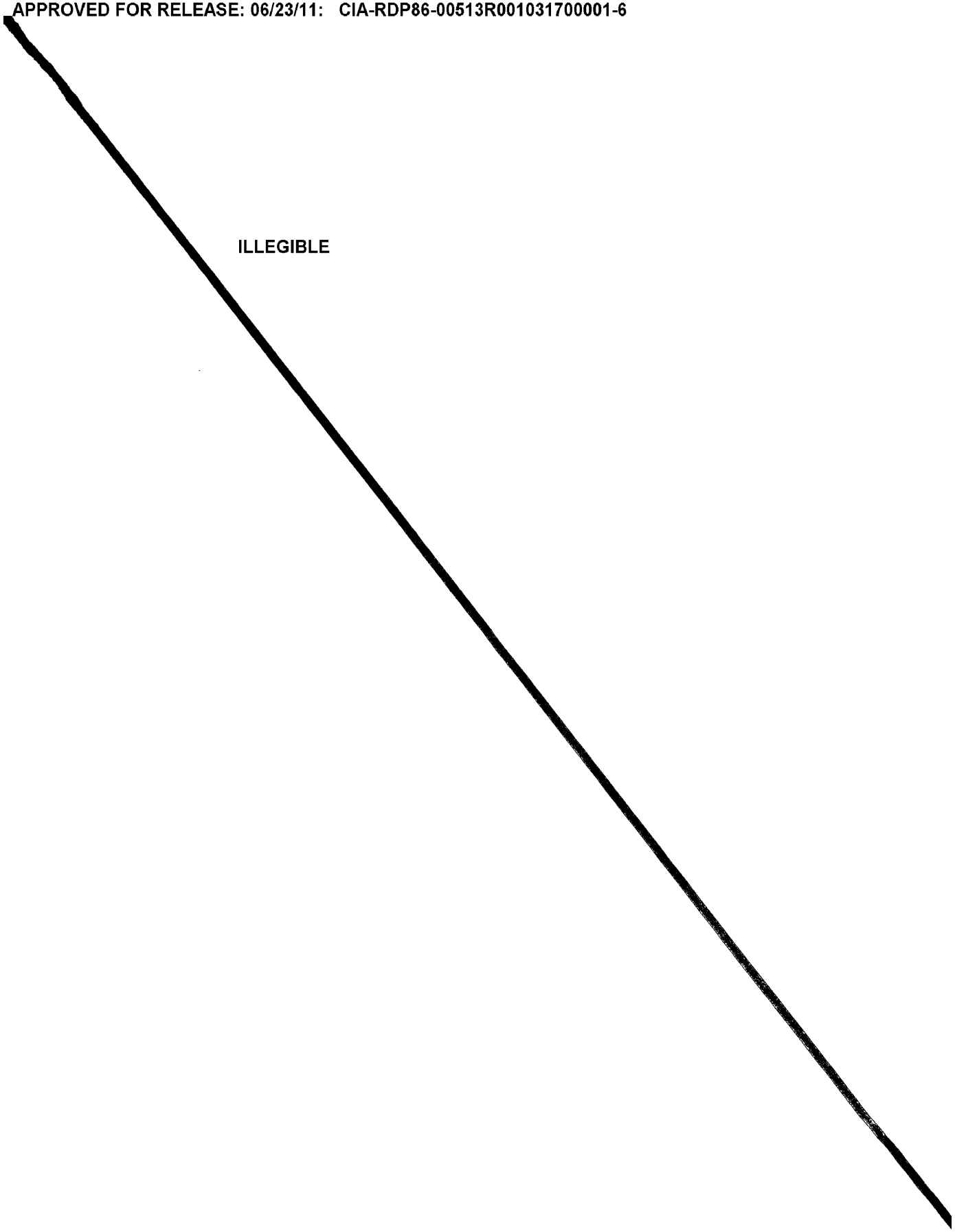


MALEVSKAYA, S. S.

The influence of log storage on the properties of spruce pitch. S. S. Malevskaya, V. D. Karnaukhova, and S. D. Kiroff. Bumazh. Prom. 30, No. 9, 14-15(1955).—Two types of spruce were studied: freshly cut (I) and stored (II) in the open from April to Sept. Sawdust from I was extd. with various solvents and the exts. were sepd. into acid and neutral components, which were further fractionated by standard methods with the following results (all values given are percentage of bone-dry wood): (a) total extractives, (b) total, (c) resin and (d) fatty acids, (e) total neutral, (f) unsaponifiable, and (g) saponifiable fractions: for the Et_2O ext. from I 2.03, 1.04, 0.80, 0.24, 0.99, 0.40, and 0.50; from II 1.57, 0.35, 0.01, 0.21, 1.00, 0.34, and 0.34; for the petr. ether ext. from I 1.70, 0.74, 0.48, 0.24, 0.95, 0.88, and 0.55; from II 0.81, 0.34, 0.23, 0.10, 0.47, 0.24, and 0.2[illegible]; for the $(CH_2Cl)_2$ ext. from I 2.14, 0.95, 0.62, 0.31, 1.1[illegible], 0.31, and 0.75; from II 1.[illegible]3, 0.70, 0.45, 0.29, 0.84, 0.2[illegible], and 0.50; for the Me_2CO ext. from I 2.57, [illegible].50, 1.39, 0.[illegible]3, 1.01, 0.39, and 0.45; and from II 2.40, 1.41, 1.01, 0.40, 1.05, 0.41, and 0.60. In a study of the relation between pitch trouble and type of extractive, unbleached sulfite pulp was extd. with Et_2O and then with Me_2CO; the extd. pulp (1 g.) was impregnated with 5 cc. of an Et_2O soln. of extractives from I or II by various solvents, and the Et_2O evapd. overnight; a part of these pulps was ball-milled to 60° S. R., and the amt. of pitch picked up by the balls and mills detd.; another part of the treated pulps (80 g.) was stirred at 700 r.p.m. in 8 l. distd. H_2O and the amt. of pitch picked up by the stirrer and vessel walls detd. The amt. of extractives present in the treated pulps, the amt. of pitch picked up during ball-milling and during stirring were: for the petr. ether ext. from I 1.33, 0.38, and 0.15; and from II 1.62, 0.21, and 0.053; for the Et_2O ext. from I 1.88, 0.32, and 0.11, and from II 1.54, 0.21, and 0.053; for the $(CH_2Cl)_2$ ext. from I 1.61, 0.16, and 0.14, and from II 1.17, 0.088, and 0.011; and for the Me_2CO ext. from I 1.74, 0.09, and 0.14, and from II 2.13, 0.068, and 0.014. John Lake Keays

Order Lenin Wood Technol. Acad. im S. M. Kirov

KOMSHILOV,N.F.; MALEVSKAYA,S.S., redaktor; ZAYCHIK,N.K., redaktor;
KIRNARSKAYA,A.A., tekhnicheskiy redaktor

[Composition of rosin and structure of resinate of pine and fir]
Sostav kanifoli i stroenie smolianykh kislot sosny i eli. Moskva,
Izd-vo Akademii nauk SSSR, 1955. 73 p. (MLRA 9:2)
(Gums and resins)

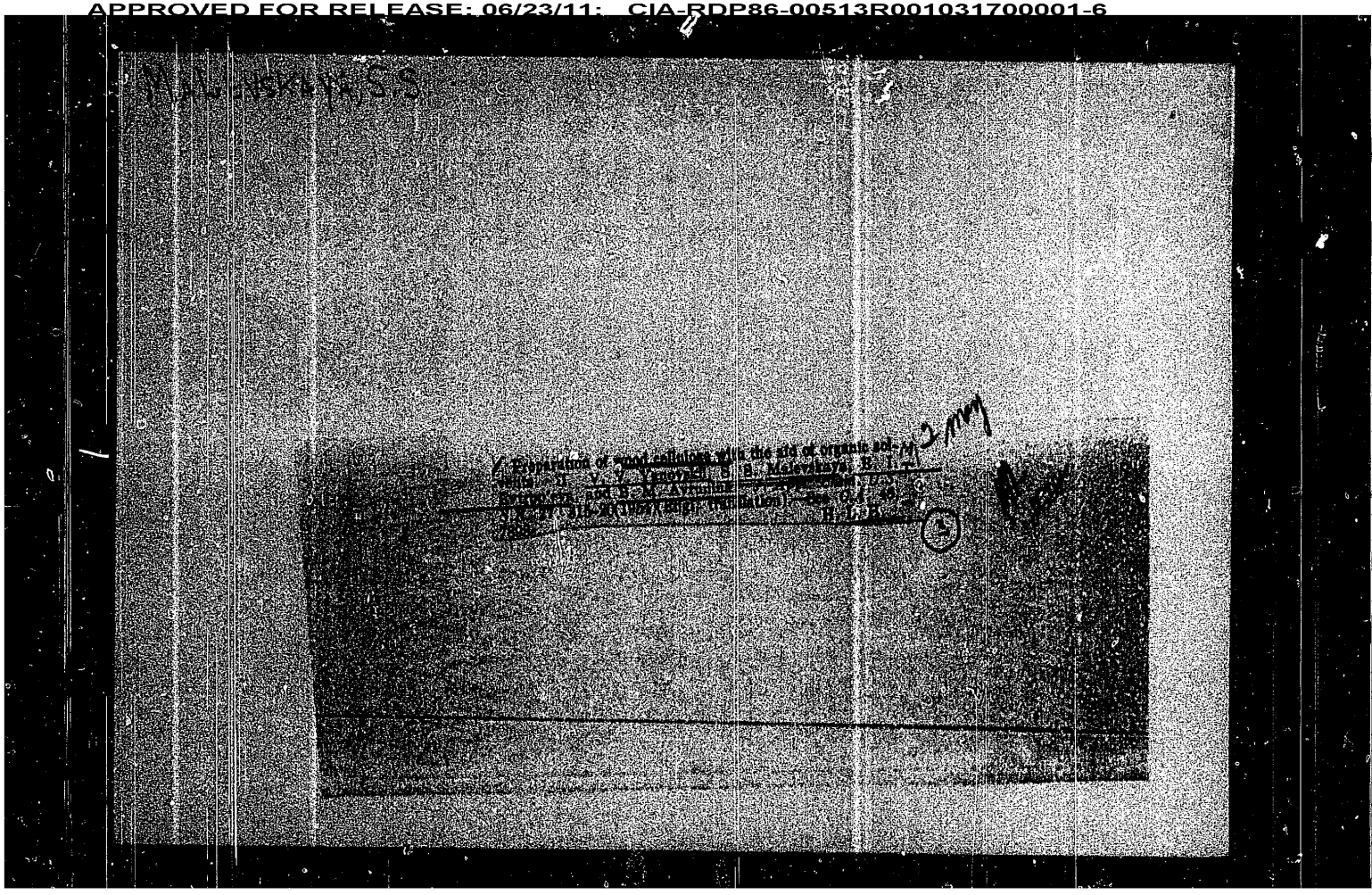
MALEVSKAYA, S. S.

(S)

Preparation of wood-cellulose with the aid of organic solvents. II. V. V. Yanovskii, S. S. Malevskaya, E. I. Evtrop'eva, and B. M. Avrutina (V. M. Molotov Technol. Inst., Leningrad). *Zhur. Priklad. Khim.* 27, 334–40 (1954).—Neither $(CH_2OH)_2$ nor glycerol in aq. soln., are very effective delignifying solvents (at 110–50°) for wood chips. The same solvents are much more effective in anhyd. condition. However, mono-hydroxy compds. (BuOH, EtOH) are more effective when mixed with H_2O.

G. M. Kosolapoff

AF 9-26-54



MALEVSKAYA, S.S.

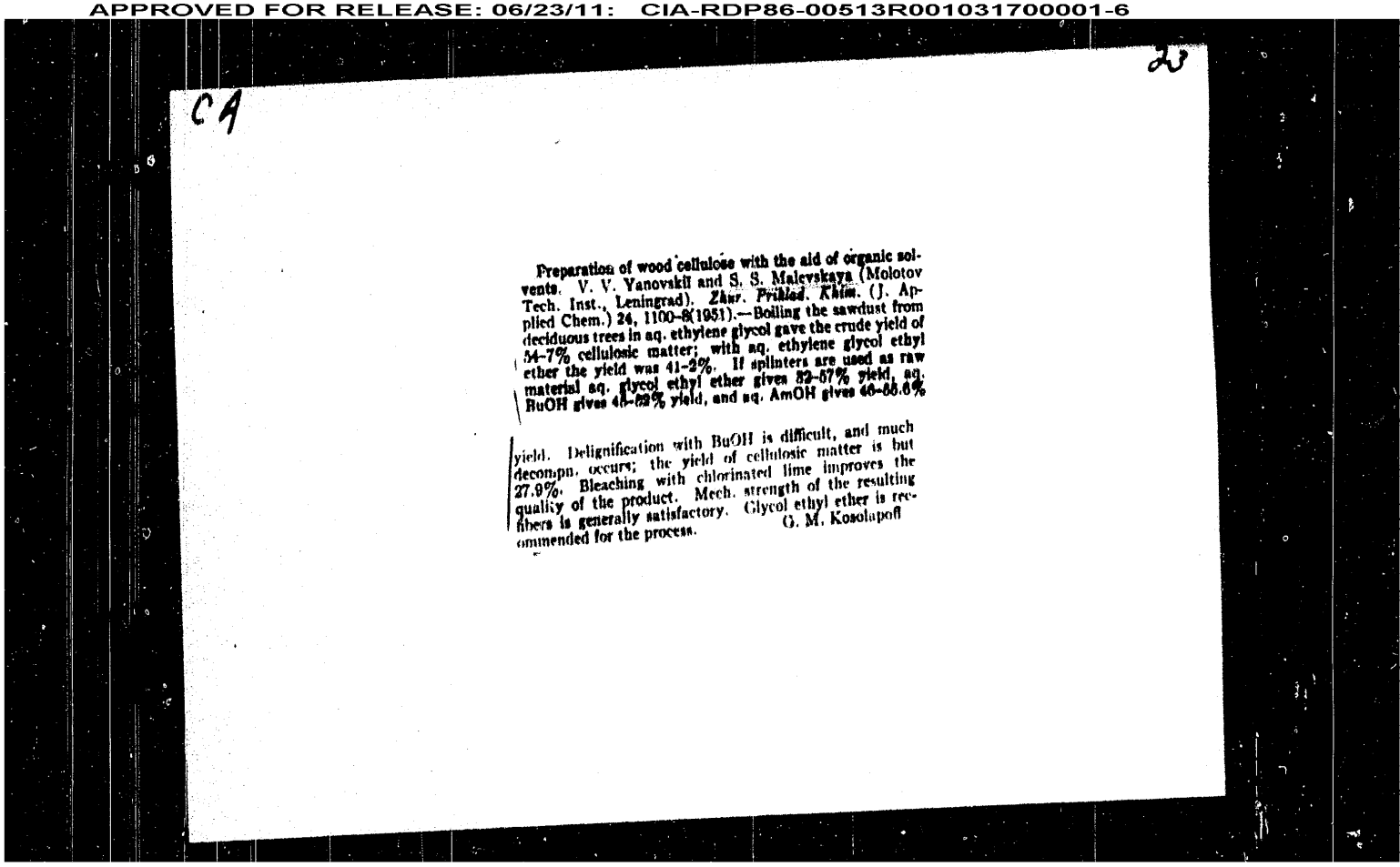
Products of autoxidation of abietic acid. Zhur. Prikład. Khim. 25, 1089-94 '52.
(CA 47 no.21:11168 '53) (MLRA 5:10)

1. Leningrad Molotov Technol. Inst.

CA

2J

The composition of the resinous deposits in the production of cellulose. S. S. Malevskaya and E. I. Evtrop'eva (Molotov Inst. Technol., Leningrad). *J. Applied Chem. U.S.S.R.* **24**, 907-10(1952)(Engl. translation).—See *C.A.* **45**, 10575*d*. B. R.



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23

Preparation of wood cellulose with the aid of organic solvents. V. V. Yanovskii and S. S. Malevskaya (Molotov Tech. Inst., Leningrad). *Zhur. Prikład. Khim.* (J. Applied Chem.) 24, 1100–8(1951).—Boiling the sawdust from deciduous trees in aq. ethylene glycol gave the crude yield of 54–7% cellulosic matter; with aq. ethylene glycol ethyl ether the yield was 41–2%. If splinters are used as raw material aq. glycol ethyl ether gives 52–57% yield, aq. BuOH gives 48–52% yield, and aq. AmOH gives 46–66.6% yield. Delignification with BuOH is difficult, and much decompn. occurs; the yield of cellulosic matter is but 27.9%. Bleaching with chlorinated lime improves the quality of the product. Mech. strength of the resulting fibers is generally satisfactory. Glycol ethyl ether is recommended for the process.

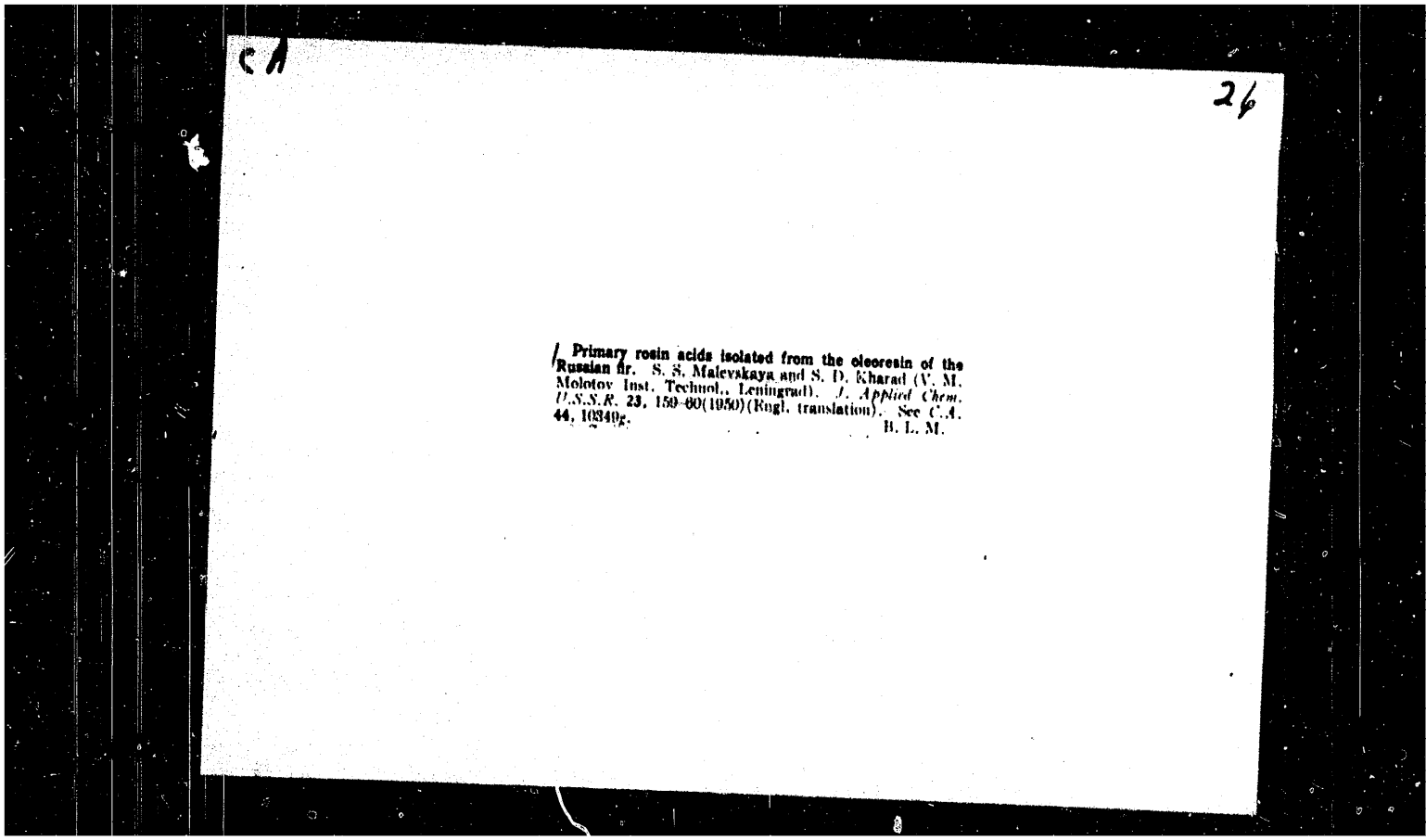
G. M. Kosolapoff

CA

27

Composition of the resinous deposits in production of cellulose. S. S. Malevskaya and E. I. Evtrop'eva (V.M. Molotov Technol. Inst., Leningrad). *Zhur. Prikład. Khim.* (J. Applied Chem.) **24**, 551–4(1951).—The neutral products of pine tar from the sulfite process contain esters and fats. The boiled tar contains 39–42% neutral substances and 51–60% acids. Bleaching with Cl and Ca hypochlorite in the absence of lye leads to but little ester sapon.; alk. treatment continues the sapon., and the neutral substances drop to 26.9%. If bleaching is done in the presence of alkali neutral substances drop to 15% and the acid content rises to 80%.

G. M. Kosolapoff



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26

Primary rosin acids isolated from the oleoresin of the Russian fir. S. S. Malevskaya and S. D. Kharad (V. M. Molotov Inst. Technol., Leningrad). *J. Applied Chem. U.S.S.R.* **23**, 159–60(1950)(Engl. translation). See C.A. **44**, 10349g.

B. L. M.

CA

-6

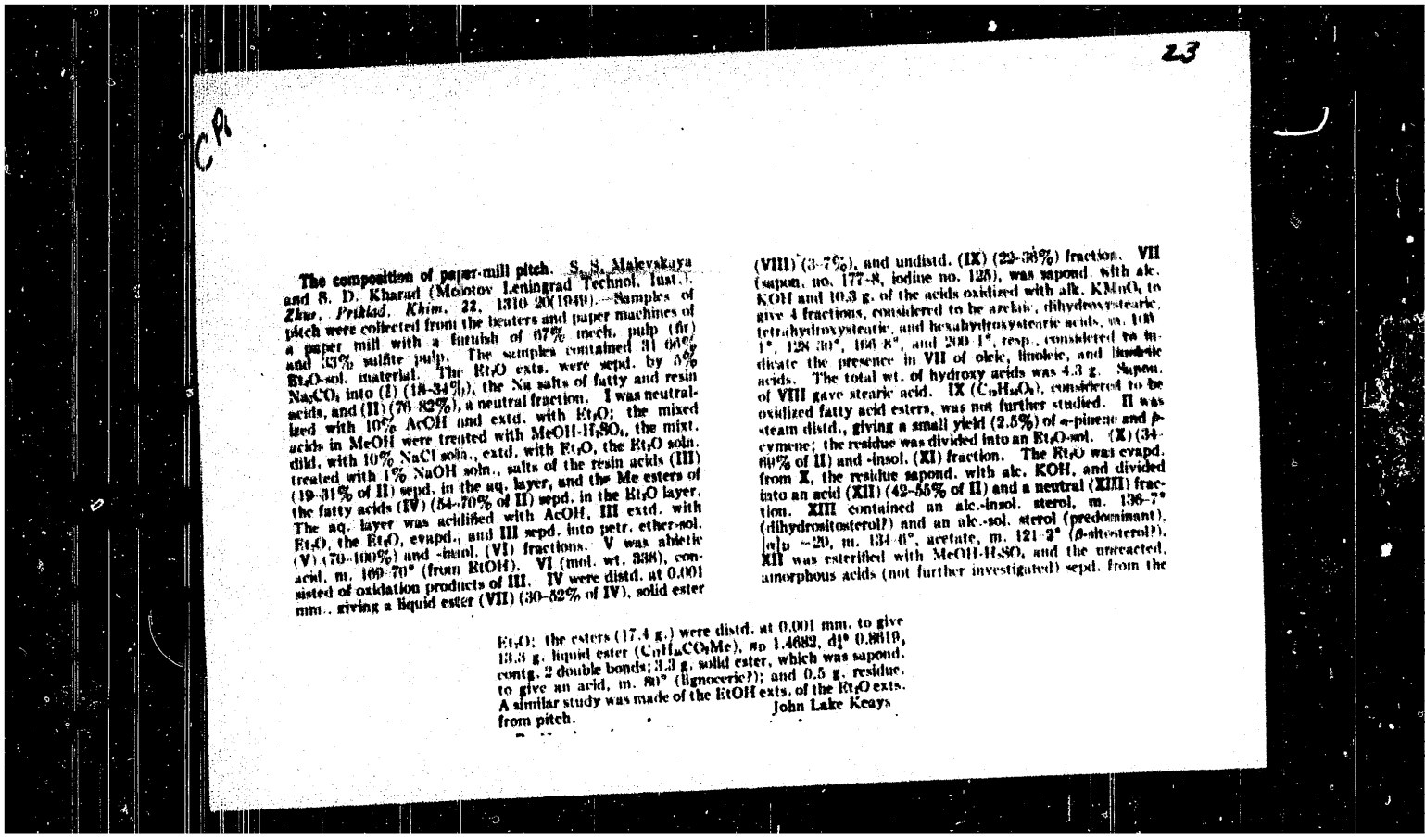
Primary rosin acids isolated from the oleoresin of Russian fir. S. S. Malevskaya and S. D. Kharad (V. M. Molotov Technol. Inst., Leningrad). *Zhur. Prikład. Khim.* (J. Applied Chem.) 23, 153-4(1950).—From 200 g. fresh oleoresin there was obtained a total of 43 g. pure rosin acids, m. 140-2°, by extn. with hot Me_2CO. Crystn. of the Na salts from H_2O and then crystn. of free acids from Me_2CO gave: *dextropimaric acid*, m. 210°, α_D 72°; *levopimaric acid*, m. 148°, α_D −275°; and *α-sapinic acid*, m. 142°, α_D −65.2°. G. M. Kosolapoff

CA MALEVSKAYA, S.

10

The mechanism and end products of the autoxidation of resin acids. D. Tishchenko, N. F. Komshilov, K. Kissel, and S. Malevskaya. *J. Gen. Chem. U.S.S.R.* 20, 1271–81 (1950) (Engl. translation).—See *C.A.* 45, 1546*e*.

R. M. S.



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The composition of paper-mill pitch. S. S. Malevskaya and S. D. Kharad (Molotov Leningrad Technol. Inst.). *Zhur. Prikład. Khim.* 22, 1310-20(1949).—Samples of pitch were collected from the beaters and paper machines of a paper mill with a furnish of 67% mech. pulp (fir) and 33% sulfite pulp. The samples contained 31-66% Et_2O-sol. material. The Et_2O exts. were sepd. by 5% Na_2CO_3 into (I) (18-34%), the Na salts of fatty and resin acids, and (II) (76-82%), a neutral fraction. I was neutralized with 10% AcOH and extd. with Et_2O; the mixed acids in MeOH were treated with MeOH-H_2SO_4, the mixt. dild. with 10% NaCl soln., extd. with Et_2O, the Et_2O soln. treated with 1% NaOH soln., salts of the resin acids (III) (19-31% of II) sepd. in the aq. layer, and the Me esters of the fatty acids (IV) (54-70% of II) sepd. in the Et_2O layer. The aq. layer was acidified with AcOH, III extd. with Et_2O, the Et_2O, evapd., and III sepd. into petr. ether-sol. (V) (70-100%) and -insol. (VI) fractions. V was abietic acid, m. 169-70° (from EtOH). VI (mol. wt. 338), consisted of oxidation products of III. IV were distd. at 0.001 mm., giving a liquid ester (VII) (30-52% of IV), solid ester (VIII) (3-7%), and undistd. (IX) (22-36%) fraction. VII (sapon. no. 177-8, iodine no. 125), was sapond. with alc. KOH and 10.3 g. of the acids oxidized with alk. $KMnO_4$ to give 4 fractions, considered to be azelaic, dihydroxystearic, tetrahydroxystearic, and hexahydroxystearic acids, m. 100-1°, 128-30°, 166-8°, and 200-1°, resp., considered to indicate the presence in VII of oleic, linoleic, and linolenic acids. The total wt. of hydroxy acids was 4.3 g. Sapon. of VIII gave stearic acid. IX ($C_{31}H_{60}O_2$), considered to be oxidized fatty acid esters, was not further studied. II was steam distd., giving a small yield (2.5%) of α-pinene and β-cymene; the residue was divided into an Et_2O-sol. (X) (34-60% of II) and -insol. (XI) fraction. The Et_2O was evapd. from X, the residue sapond. with alc. KOH, and divided into an acid (XII) (42-55% of II) and a neutral (XIII) fraction. XIII contained an alc.-insol. sterol, m. 136-7° (dihydrositosterol?) and an alc.-sol. sterol (predominant), $[\alpha]_D$ −29, m. 134-6°, acetate, m. 121-3° (β-sitosterol?). XII was esterified with MeOH-H_2SO_4, and the unreacted, amorphous acids (not further investigated) sepd. from the Et_2O; the esters (17.4 g.) were distd. at 0.001 mm. to give 13.3 g. liquid ester ($C_{31}H_{59}CO_2Me$), n_D 1.4682, d_4^{20} 0.8619, contg. 2 double bonds; 3.3 g. solid ester, which was sapond. to give an acid, m. 80° (lignoceric?); and 0.5 g. residue. A similar study was made of the EtOH exts. of the Et_2O exts. from pitch.

John Lake Keays

MALEVSKAIA, S. S.

S. S. Malevskaia and E. V. Kazeeva, "Investigation in the field of resin acids in conifers. VI. Autoxidation of resin acids." P. 854

The greatest oxidisability by pure oxygen showed abietic acid, about 2 g-mol. O_2; levopimaric acid, α-sapinic acid and prosbietic acid was added about 1 g. mol. O_2. Deutropimaric acid and dihydroabietic acid showed great stability against the action of oxygen and practically did not oxidise.

Chair of Organic Chemistry of the Kirov Academy of Forestry October 23, 1947

SO: Journal of Applied Chemistry (USSR) 21, No. 8, August (1948)

MALEVSKAYA, S. S.

Mbr., Chair Organic Chemistry Forestry Engineering Inst. im. S. M. Kirov, -c1949-.
Mbr., Leningrad Technological Inst. im Molotov, -c1949-.

"The Composition of 'Harmful' Resin in Paper Production,"

SO: Zhuv. Prik. Khim., No. 12, 1949.

"Research in the Field of Resin Acids of Conifers: IV. The Problem of Autoxidation of Resin Acids,"

SO: Zhuv. Prik. Khim., No. 9, 1948;

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Resin acids of coniferous trees. IV. The structure of *l*-pimaric acid. S. S. Makevnikova. *J. Applied Chem.* (U. S. S. R.) 13, 1085-97(in French, 1097)(1940); cf. Krestinskii, *et al.*, *C. A.* 34, 7920[a].—The structure of *l*-*pimaric* (I) acid was detd. by ozonizing the acid and, after decompn. of the product, identifying the products of decompn. Preliminary expts. disclosed that I has a conjugated system of double bonds. Thus, mixing I with maleic anhydride in C_6H_6 at 18° yielded an addn. product, m. 226-7°; mixing I with *p*-benzoquinone in C_6H_6 produced also an addn. product, m. 194°. The *diozonide* of I was prepd. by treating 10 g. of I in AcOEt with 3-6% O_3. The yield was 13 g. of *diozonide* (II). II was decompd. with steam, yielding: (1) products volatile with steam; (2) not volatile with steam but sol. in water; and (3) not volatile with steam and insol. in water. The products in (1) were *isobutyric acid* and an unidentified aldehyde, probably (from its odor) paraldehyde, that in (2) was a *dihydroxyketoaldehydocarboxylic acid*, $C_{11}H_{18}O_6$, which upon standing in the presence of air was oxidized to a *dihydroxyketodicarboxylic acid*, $C_{11}H_{18}O_7$; in (3) the products were not identified. In ozonizing I, besides the diozonide, the formation of *hydroxyozonide*, $C_{20}H_{30}O_{10}$, was also observed. Conclusions: The structure proposed by Ruzicka, Bacon and Kuiper (*C. A.* 32, 2945[1]) is the correct structure for I. The ozonide of I decompd. according to the aldehyde-acidic scheme.

A. A. Podgorny

Rosin acids of coniferous trees. III. Primary rosin acids separated from the sap of Pinus sylvestris. V. N. Krestinskii, S. S. Malevskaya, N. F. Komshilov and E. V. Kazeeva. *J. Applied Chem.* (U. S. S. R.) 12, 1840-7(in French, 1847)(1939); cf. *C. A.* 34, 6200[2].—Among the resin acid isomers of the compn. $C_{20}H_{30}O_2$ were found *d*-pimaric, *l*-pimaric and α-sapinic acids; the presence of β-sapinic acid is probable. The first two are identical with the pimaric acids found in *P. maritima*, *P. palustris* and *P. excelsa*. The second and third acids are isomerized into secondary acids through the action of acidic substances, yielding abietic acid as the final product of transformation, while the *d*-pimaric acid remains unchanged under these conditions. Forty references. A. A. Boehtlingk

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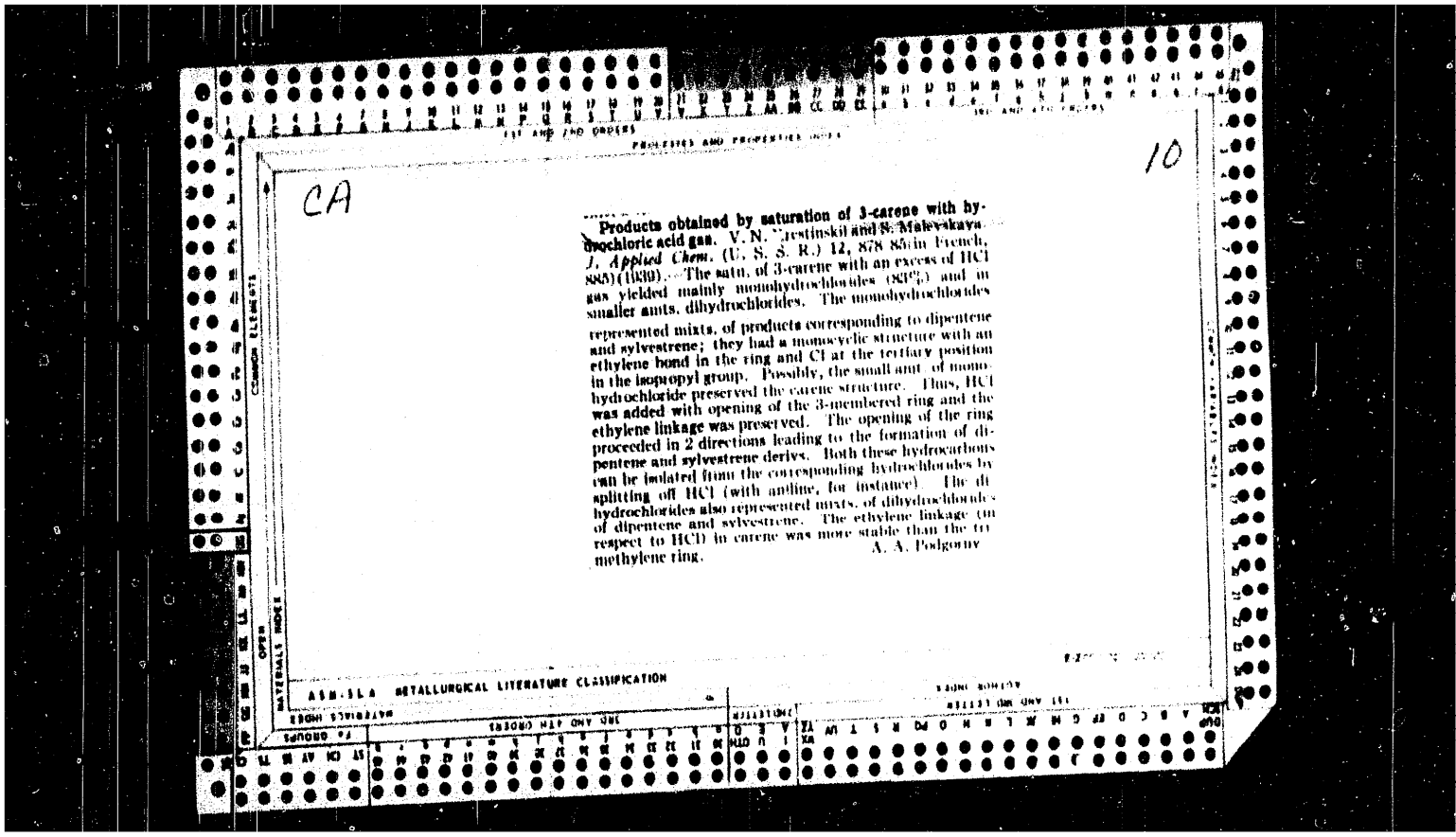
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



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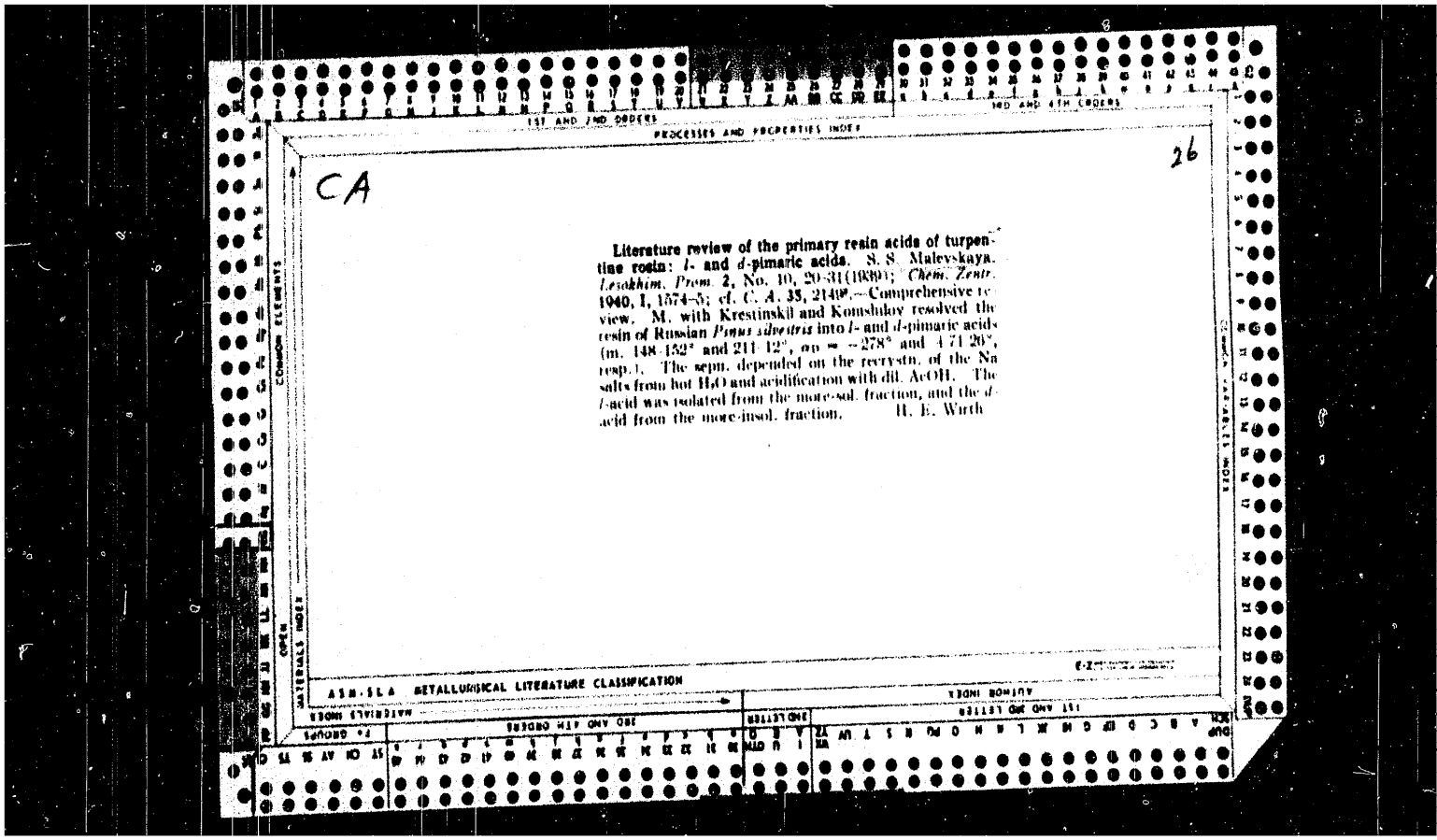
Products obtained by saturation of 3-carene with hydrochloric acid gas. V. N. [illegible]restinskii and S. Malevskaya. *J. Applied Chem.* (U. S. S. R.) 12, 878-85(in French, 885)(1939).—The satn. of 3-carene with an excess of HCl gas yielded mainly monohydrochlorides (80%) and in smaller amts. dihydrochlorides. The monohydrochlorides represented mixts. of products corresponding to dipentene and sylvestrene; they had a monocyclic structure with an ethylene bond in the ring and Cl at the tertiary position in the isopropyl group. Possibly, the small amt. of monohydrochloride preserved the carene structure. Thus, HCl was added with opening of the 3-membered ring and the ethylene linkage was preserved. The opening of the ring proceeded in 2 directions leading to the formation of dipentene and sylvestrene derivs. Both these hydrocarbons can be isolated from the corresponding hydrochlorides by splitting off HCl (with aniline, for instance). The dihydrochlorides also represented mixts. of dihydrochlorides of dipentene and sylvestrene. The ethylene linkage (in respect to HCl) in carene was more stable than the cyclopropane ring.

A. A. Podgornyy



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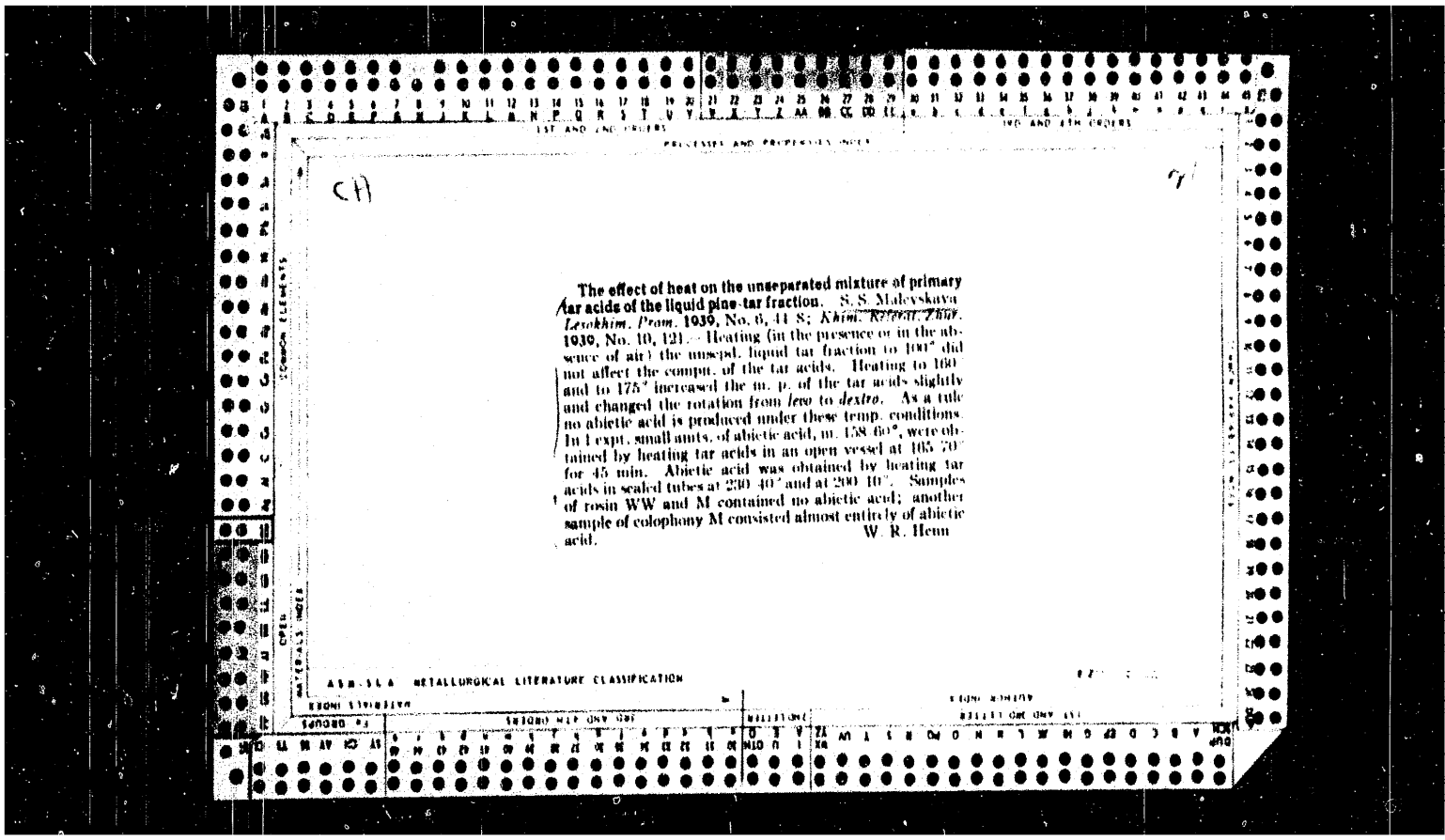
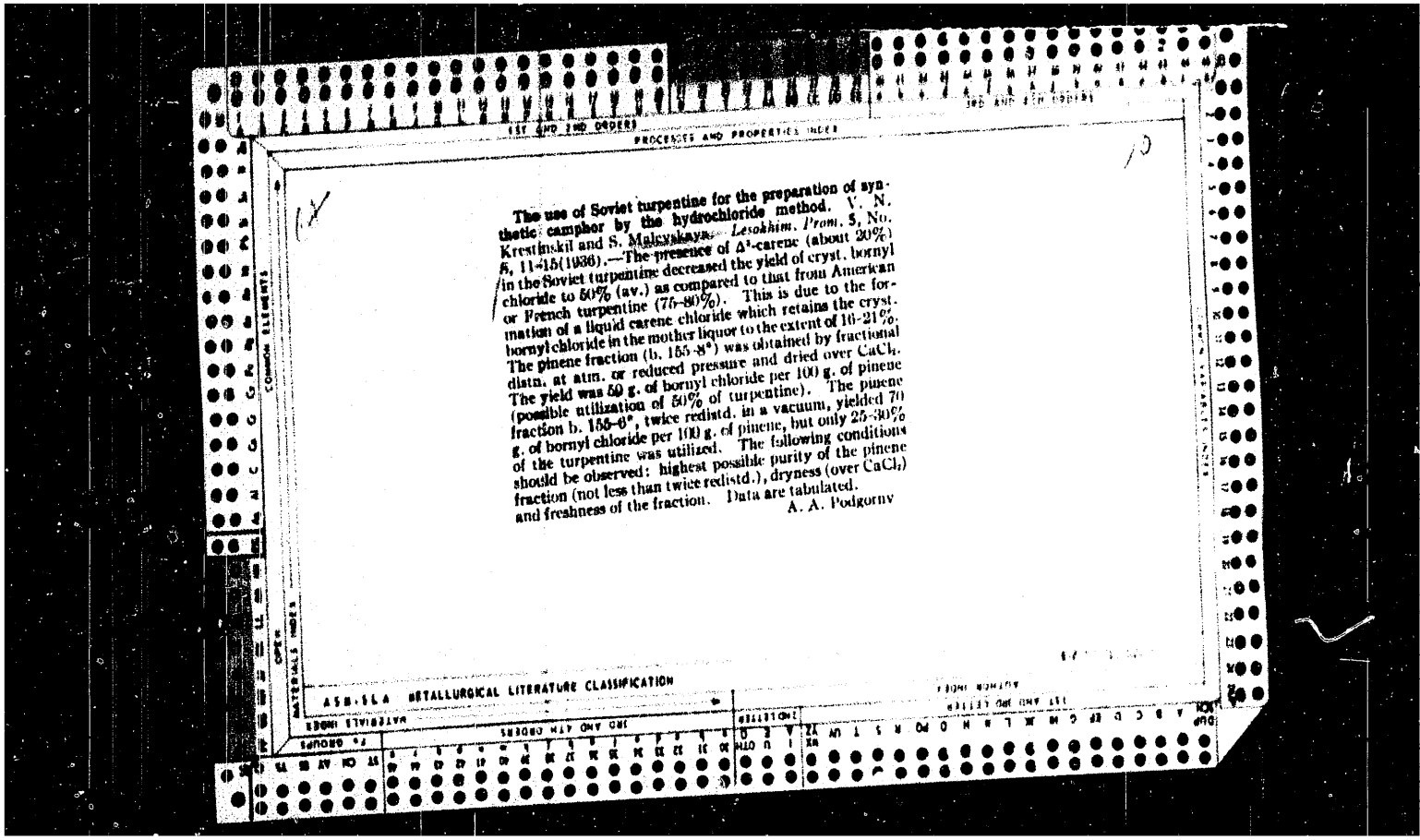
Literature review of the primary resin acids of turpentine rosin: *l*- and *d*-pimaric acids. S. S. Malevskaya. *Lesokhim. Prom.* **2**, No. 10, 20-31(1939); *Chem. Zentr.* **1940, I**, 1574–5; cf. *C. A.* **35**, 2140⁹.—Comprehensive review. M. with Krestinskii and Komshilov resolved the resin of Russian *Pinus silvestris* into *l*- and *d*-pimaric acids (m. 148-152° and 211-12°, α_D = −278° and +171.20°, resp.). The sepn. depended on the recrystn. of the Na salts from hot H_2O and acidification with dil. AcOH. The *l*-acid was isolated from the more-sol. fraction, and the *d*-acid from the more-insol. fraction. H. E. Wirth



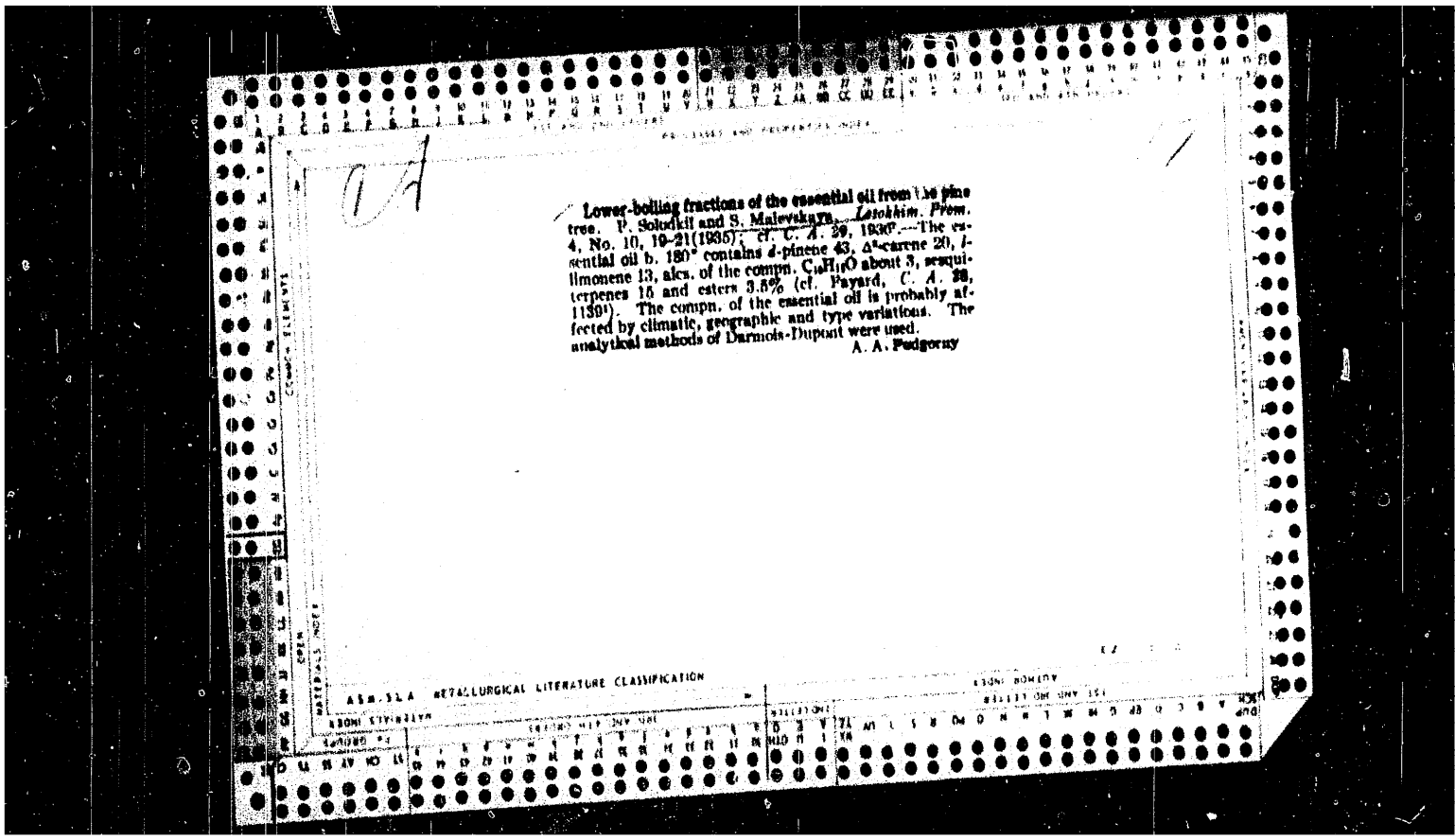
The effect of heat on the unseparated mixture of primary tar acids of the liquid pine-tar fraction. S. S. Malevskaya *Lesokhim. Prom.* **1930**, No. 6, 44-8; *Khim. Referat. Zhur.* **1930**, No. 10, 121.—Heating (in the presence or in the absence of air) the unsepd. liquid tar fraction to 100° did not affect the compn. of the tar acids. Heating to 160° and to 175° increased the m. p. of the tar acids slightly and changed the rotation from *levo* to *dextro*. As a rule no abietic acid is produced under these temp. conditions. In 1 expt. small amts. of abietic acid, m. 158-60°, were obtained by heating tar acids in an open vessel at 105-70° for 45 min. Abietic acid was obtained by heating tar acids in sealed tubes at 230-40° and at 200-10°. Samples of rosin WW and M contained no abietic acid; another sample of colophony M consisted almost entirely of abietic acid.

W. R. Henn



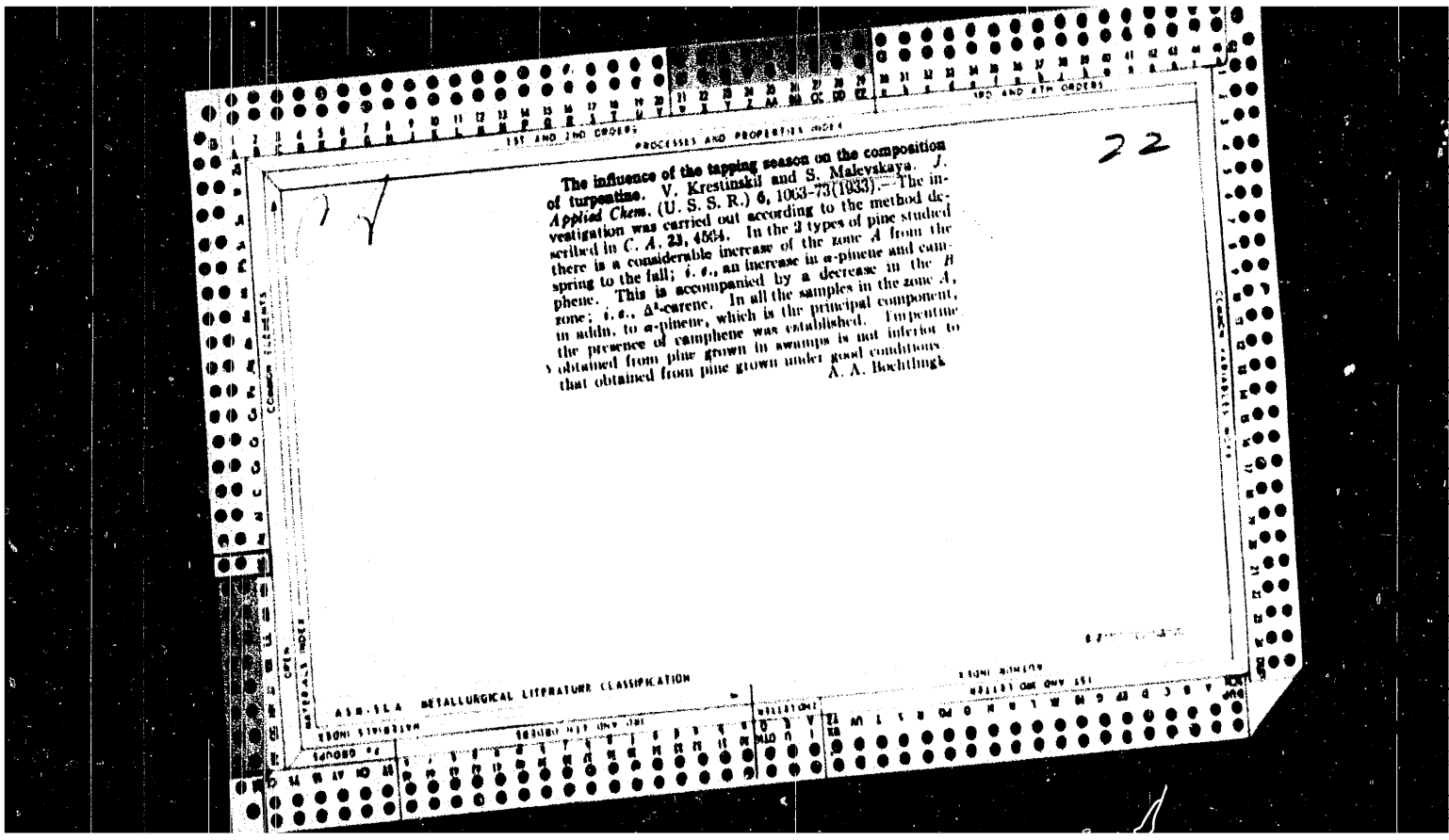
The use of Soviet turpentine for the preparation of synthetic camphor by the hydrochloride method. V. N. Krestinskii and S. Malevskaya. *Lesokhim. Prom.* 5, No. 6, 11-15(1936).—The presence of Δ^3-carene (about 20%) in the Soviet turpentine decreased the yield of cryst. bornyl chloride to 50% (av.) as compared to that from American or French turpentine (75–80%). This is due to the formation of a liquid carene chloride which retains the cryst. bornyl chloride in the mother liquor to the extent of 16-21%. The pinene fraction (b. 155-8°) was obtained by fractional distn. at atm. or reduced pressure and dried over $CaCl_2$. The yield was 50 g. of bornyl chloride per 100 g. of pinene (possible utilization of 50% of turpentine). The pinene fraction b. 155-6°, twice redistd. in a vacuum, yielded 70 g. of bornyl chloride per 100 g. of pinene, but only 25-30% of the turpentine was utilized. The following conditions should be observed: highest possible purity of the pinene fraction (not less than twice redistd.), dryness (over $CaCl_2$) and freshness of the fraction. Data are tabulated.

A. A. Podgorny

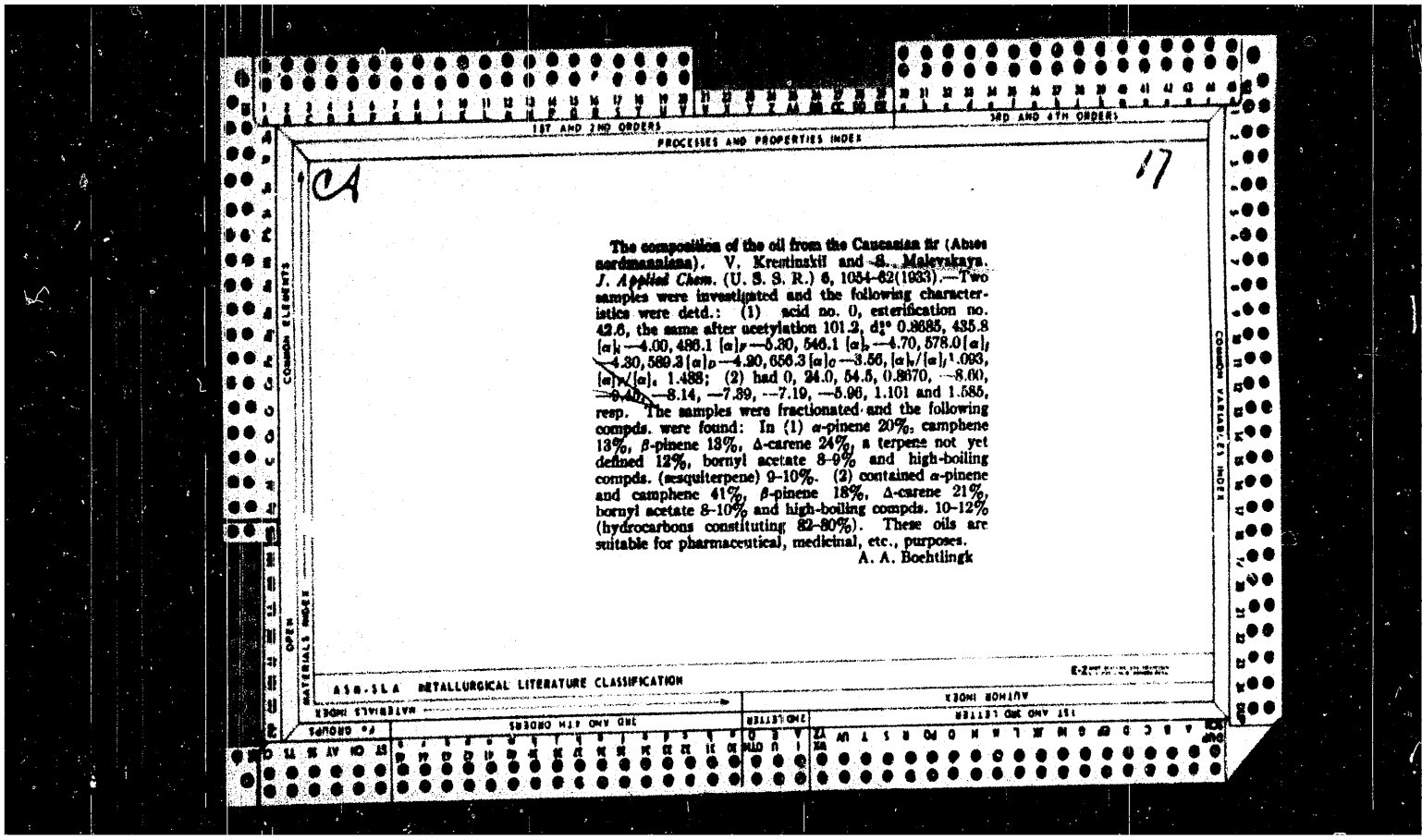


Lower-boiling fractions of the essential oil from the pine tree. P. Soludkil and S. Malevskaya. *Lesokhim. Prom.* 4, No. 10, 19–21(1935); cf. *C. A.* 29, 1930°.—The essential oil b. 180° contains *d*-pinene 43, Δ³-carene 20, *l*-limonene 13, alcs. of the compn. $C_{10}H_{18}O$ about 3, sesquiterpenes 15 and esters 3.5% (cf. Payard, *C. A.* 28, 1139¹). The compn. of the essential oil is probably affected by climatic, geographic and type variations. The analytical methods of Darmois-Dupont were used.

A. A. Pudgorny

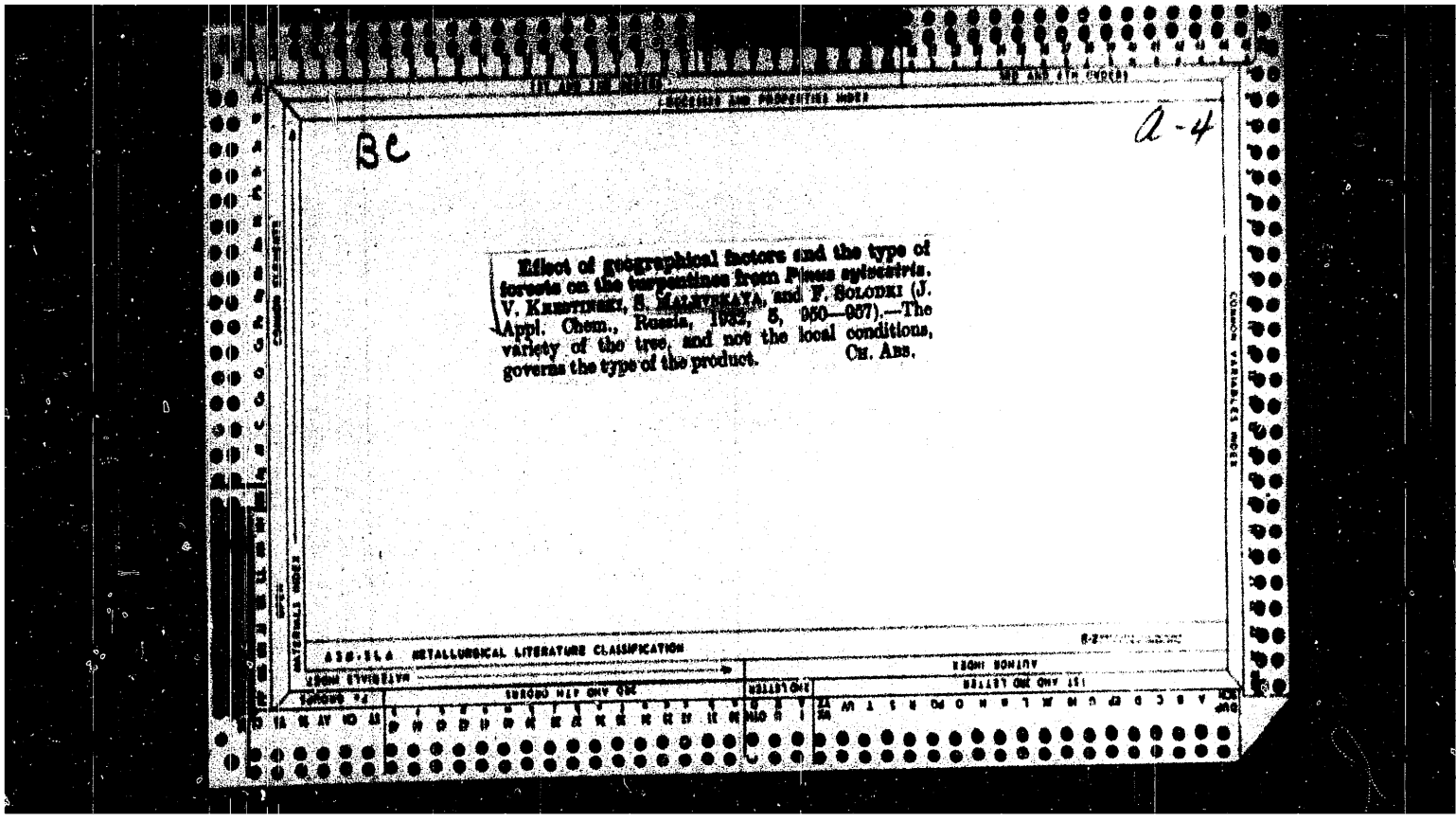


The influence of the tapping season on the composition of turpentine. V. Krestinskii and S. Malevskaya. *J. Applied Chem.* (U. S. S. R.) **6**, 1063–73(1933).—The investigation was carried out according to the method described in *C. A.* **23**, 4654. In the 3 types of pine studied there is a considerable increase of the zone *A* from the spring to the fall; *i. e.*, an increase in α-pinene and camphene. This is accompanied by a decrease in the *B* zone; *i. e.*, Δ^3-carene. In all the samples in the zone *A*, in addn. to α-pinene, which is the principal component, the presence of camphene was established. Turpentine obtained from pine grown in swamps is not inferior to that obtained from pine grown under good conditions.
A. A. Bochtlingk



The composition of the oil from the Caucasian fir (Abies nordmanniana). V. Krestinskii and S. Malevskaya. *J. Applied Chem.* (U. S. S. R.) 6, 1054-62(1933).—Two samples were investigated and the following characteristics were detd.: (1) acid no. 0, esterification no. 42.6, the same after acetylation 101.2, d_4^{15} 0.8685, 435.8 $[\alpha]_i$ —4.00, 486.1 $[\alpha]_F$ —5.20, 546.1 $[\alpha]_b$ —4.70, 578.0 $[\alpha]_l$ —4.30, 589.3 $[\alpha]_D$ —4.20, 656.3 $[\alpha]_C$ —3.56, $[\alpha]_b/[\alpha]_l$ 1.093, $[\alpha]_V/[\alpha]_l$ 1.488; (2) had 0, 24.0, 54.5, 0.8670, —8.60, —8.40, —8.14, —7.89, —7.19, —5.96, 1.101 and 1.585, resp. The samples were fractionated and the following compds. were found: In (1) α-pinene 20%, camphene 13%, β-pinene 13%, Δ-carene 24%, a terpene not yet defined 12%, bornyl acetate 8–9% and high-boiling compds. (sesquiterpene) 9–10%. (2) contained α-pinene and camphene 41%, β-pinene 18%, Δ-carene 21%, bornyl acetate 8–10% and high-boiling compds. 10–12% (hydrocarbons constituting 82–80%). These oils are suitable for pharmaceutical, medicinal, etc., purposes.

A. A. Boehtlingk



BC

a-4

Effect of geographical factors and the type of forests on the turpentines from Pinus sylvestris. V. Krestinski, S. Malyshkaya, and F. Solodki (J. Appl. Chem., Russia, 1932, 5, 950—957).—The variety of the tree, and not the local conditions, governs the type of the product. Ch. Abs.

METALLURGICAL LITERATURE CLASSIFICATION

MALEVSKAYA, S.

D. Tischchenko, N. Komshilov, K. Kisse, and S. Malevskaya - "The mechanism and final products of autoxidation of resin acids." (p. 1225)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1950, Vol. 20, No. 7.

MALEVSKAYA, I.A.

Raw and boiled water. Azerb. med. zhur. no 6:60 Je '62.
(MIRA 17:8)

Magnetic and resonance properties...

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gos. universiteta (Division of Physics of Moscow State University)

Fig. 1. Temperature dependence of the spontaneous magnetization of ferrites. Legend: (1) $2.9Y_2O_3 \cdot 0.1Tb_2O_3 \cdot 5Fe_2O_3$; (2) $2.7Y_2O_3 \cdot 0.3Tb_2O_3 \cdot 5Fe_2O_3$; (3) $2.2Y_2O_3 \cdot 0.8Tb_2$.

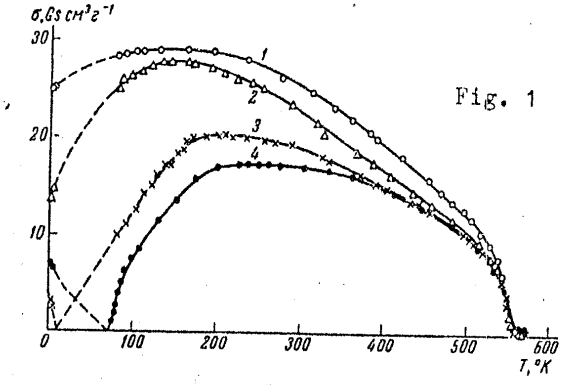


Fig. 1

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Magnetic and resonance properties...

and σ_a are the magnetic moments of the sublattices. Near absolute zero, saturation magnetization diverged from the values calculated by Néel. This is explained in that the magnetic moments of Nd^{3+} ions do not attain any ferromagnetic order in the sublattices, as exchange interaction is insufficient. In the ferrites $(3-x)Y_2O_3 \cdot xLu_2O_3 \cdot 5Fe_2O_3$, the magnetic moments did not change with x. The weak change of the Curie temperature ($\sim 10^{\circ}$) observed may be due to the change of lattice parameters. Structural inhomogeneities arise due to the smaller radius of Lu ions, and in their turn give rise to magnetic inhomogeneities. In these ferrite systems magnetic viscosity effects have been discovered: Y-Tb ferrites: 4-60°K, ~10 oe, relaxation time of magnetization response: 5 - 10 min. Y-Nd ferrites: 4.2°K, 4000 oe, 30 - 40 min. Y-Lu ferrites: viscosity at 4.2°K, due to structure. There are 4 figures and 8 references: 3 Soviet and 5 non-Soviet. The three most recent references to English-language publications read as follows: Kittel C., Portis A., de Gennes P., Phys. Rev., 116, no. 2, 323, (1959); Dillon J., Phys. Rev., 111, 6 (1958); White R., J. Appl. Phys., 32, 1178 (1961).

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Magnetic and resonance properties...

compensation point is further shifted to higher temperatures (curve 4). At low temperatures, a sharp increase of the coercive force H_c is observed as the Tb content rises. The vicinity of the compensation point is supposed to be the cause of this. J. Dillon (Phys. Rev., 111, 6 (1958)) and the authors (Zh. eksperim. i teoret. fiz., 40, no. 2, 711, (1961)) showed both experimentally and theoretically that the resonance line width ΔH passes through a maximum when minute Tb amounts are added to the ferrite. With an increase of the Tb content, the temperature anomaly of ΔH widens as a function of temperature. At very low temperatures ($2^{\circ}K$), ΔH is not diminished. This is explained by the fact that at low temperatures the ΔH broadening is caused not only by the Kittel-Dillon mechanism but also by the heterogeneous magnetic state due to the vicinity of the compensation point. The polycrystalline Y-Nd ferrites $(3-x)Y_2O_3 \cdot xNd_2O_3 \cdot 5Fe_2O_3$ were of garnet structure with $x \leq 2$. The lattice periods of these garnets increased with increasing Nd content, from 12.37 Å ($3Y_2O_3 \cdot 5Fe_2O_3$) to 12.50 Å ($Y_2O_3 \cdot 2Nd_2O_3 \cdot 5Fe_2O_3$). When Y^{3+} ions were completely replaced by Nd^{3+} ions, the resulting specimens had a perovskite structure. In agreement with Néel, the magnetic moments of ferrite garnets at absolute zero were found to be $\sigma_b = 6\sigma_c - (6\sigma_a + 4\sigma_d)$, $\sigma_c > \sigma_d$.

9.2571
24.7900
15.2660

1482 1144 1143, 1147

30068
S/048/61/025/011/013/037
B104/B102

AUTHORS: Belov, K. P., and Malevskaya, L. A.

TITLE: Magnetic and resonance properties of yttrium ferrite garnets when substituting Tb^{3+}, Nd^{3+}, and Lu^{3+} ions for Y^{3+} ions

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 25, no. 11, 1961, 1371 - 1375

TEXT: The authors studied the effect of the magnetic sublattice structure upon the magnetic properties of ferrites. For this purpose, they examined the magnetic and resonance properties of yttrium ferrite garnets, in which the yttrium ions were replaced partly or entirely by terbium, neodymium, or lutecium ions. The spontaneous magnetization of the ferrite garnets $(3-x)Y_2O_3 \cdot xTb_2O_3 \cdot 5Fe_2O_3$, is shown in Fig. 1 as a function of temperature. As may be seen (curves 1 and 2), these curves are abnormal. If the Tb content is increased, a compensation point of the magnetic moments of the sublattices appears (curve 3). According to a calculation by Néel's scheme this point should be near 0°K. Rare-earth impurities are probably responsible for its shift to 10°K. On further increase of the Tb content, the

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Concerning the anomalous ...

interaction between ions:
a) Strong negative interaction between ions Fe^{3+}-Fe^{3+}.
b) Weak positive interaction between ions Gd^{3+}-Gd^{3+}.
c) Weak negative interactions between ions Fe^{3+}-Gd^{3+}.

G.V. Skrotskiy and L.V. Kurbatov are mentioned in the article. There are 10 figures and 15 references: 9 Soviet-bloc and 6 non-Soviet-bloc. The English language references read as follows:

Ref. 3: R. De Gennes, C. Kittel, A. Portis. Phys. Rev., 1959, v.116, 323.
Ref.10: A. Kip. Rev. Mod. Phys., 1953, v.25, 229, 7.
Ref.11: B. Calhoun, J. Overmeyer, W. Smith. Phys. Rev., 1957, v.107, 993.
Ref.13: J. Dillon, Phys. Rev., 1958, v.111, 6.

ASSOCIATION: Institut kristallografii AN SSSR
(Institute of Crystallography, AS USSR)
Fizicheskiy fakul'tet MGU
(Faculty of Physics, MGU)

Card 3/3

SUBMITTED: January 2, 1961

Concerning the anomalous ....

remains fairly constant up to a temperature of about 560 °K at which a sharp increase again occurs; in the case of lower density ferrites of the same composition ΔH is much greater at low temperatures but falls to approximately the same value as for the higher density ferrite at 560 °K. In the case of the monocrystalline ferrite (2.2% MgO, 54% MnO, 43.6% Fe_2O_3) there is a very sudden increase in ΔH and also the coercive force H_c at the Curie point ~412 °K. For the garnet-gadolinium oxide ferrite ΔH and H_c show a rapid increase at ~270 °K. At low temperatures the ratio $\Delta H/\Delta H_K$ where ΔH_K is the line width at room temperature is given for the case of the garnet-yttrium ferrite; a marked maximum occurs about 40 °K for the monocrystalline form and at about 10 °K for the polycrystalline form. It is demonstrated that the effect of small amounts of terbia produces a very marked effect on the temperature dependence of $\Delta H/\Delta H_K$ for Y_2O_3. The temperature dependence of the magnetisation and coercive force in weak fields for garnet-gadolinium ferrite at low temperatures is also investigated. In the garnet-gadolinium ferrite there are the following types of

Card 2/3

32650
S/126/61/012/005/002/028
E039/E135

24,7900 (1055,1144,1147,1163)

AUTHORS: Belov, K.P., Belov, V.F., Malevskaya, L.A., Ped'ko, A.V., and Sokolov, V.I.

TITLE: Concerning the anomalous temperature dependence of the width of the ferromagnetic resonance absorption lines in ferrites

PERIODICAL: Fizika metallov i metallovedeniye, v.12, no.5, 1961, 636-643

TEXT: An investigation was made of the temperature dependence of the width of the ferromagnetic resonance absorption lines in ferrites with spinel and garnet structure (mono- and polycrystalline) in three temperature regions: near the Curie point, in the neighbourhood of the magnetic compensation point, and in the low temperature region. At the same time measurements were made of the temperature dependence of magnetic characteristics in static magnetic fields. It is shown that for monocrystalline magnesium-manganese ferrite (6.9% MgO, 37.3% MnO, 55.9% Fe_2O_3) the width of the resonance absorption line ΔH increases rapidly at about 550 °K. For polycrystalline yttrium ferrite ΔH

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88426

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B006/B056

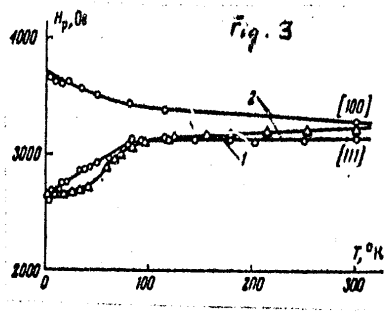

Fig. 3

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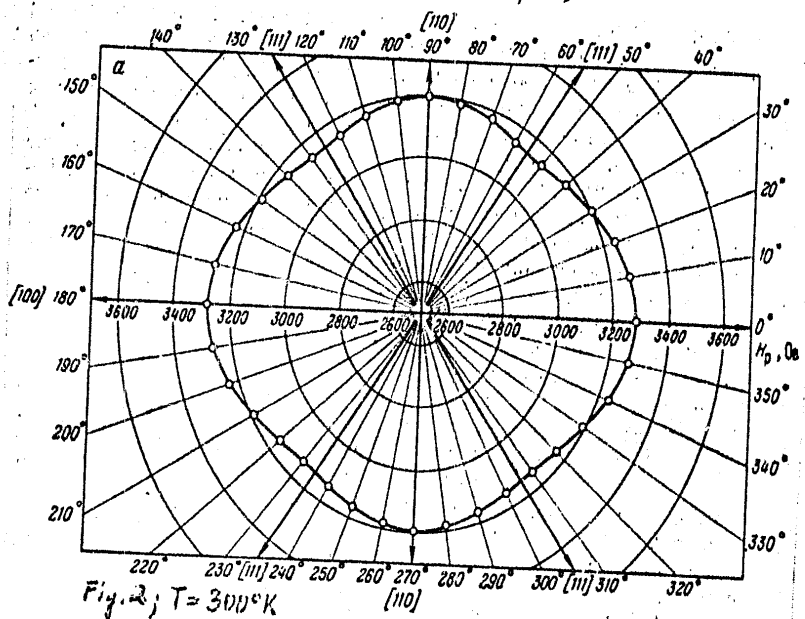

Fig. 2; T = 300°K

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88426

Resonance and Magnetic Properties of Garnet-type Yttrium Ferrites at Low Temperatures

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B006/B056

SUBMITTED: June 29, 1960

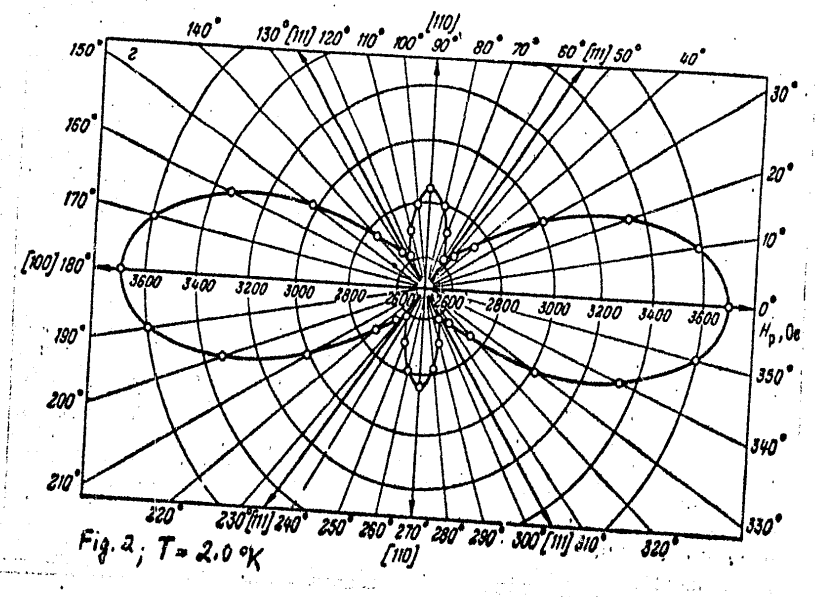

Fig. 2; T = 2.0 °K

Card 3/5

88426

Resonance and Magnetic Properties of Garnet-type Yttrium Ferrites at Low Temperatures

S/056/60/039/006/011/063
B006/B056

by measuring the resonance field strength in dependence of the direction relative to the crystallographic axes in the (110)-plane (in which all main axes were located) are for T = 300, 77, 20, and 2.0°K in the four diagrams shown in Fig. 2. Measurements of the temperature dependence of the ferromagnetic resonance absorption line widths showed that the ferromagnetic resonance absorption in yttrium ferrite garnets shows practically no anisotropy, not only at room temperature, but also at helium temperatures. The line width ΔH increases with decreasing temperature, where single crystals between 20 and 40°K have steep maxima. At 40°K the line width is more than 15 times as great as at room temperature. Polycrystalline specimens have a much lower and broader maximum (4 - 60°K). The results obtained are compared with those obtained by Dillon, Spencer, Kittel et al. As a measurement of the static magnetization curves showed, magnetic viscosity is large in the temperature range of the line width maxima. The authors thank Professor A. I. Shal'nikov for his interest and advice and V. A. Timofeyeva for placing single crystals at their disposal. There are 6 figures, 1 table, and 4 references: 1 Soviet and 3 US.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

Card 2/5

88426

S/056/60/039/006/011/063
B006/B056

24.7900 (1147, 1158, 1160)

AUTHORS: Belov, K. P., Malevskaya, L. A., Sokolov, V. I.

TITLE: Resonance and Magnetic Properties of Garnet-type Yttrium Ferrites at Low Temperatures

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 6(12), pp. 1542-1547

TEXT: The authors investigated the temperature dependence of the anisotropy of the resonance field and the resonance line widths of single- and polycrystalline yttrium ferrite specimens ($3Y_2O_3 \cdot 5Fe_2O_3$) with garnet structure in the temperature range 2 - 300°K. At the same time, line widths and magnetization curves in static fields were measured on polycrystalline specimens. The ferromagnetic resonance was investigated at 8500 Mc/sec. For the temperature measurement, a copper constantan thermocouple was used. The crystals were grown by V. A. Timofeyeva at the Institut kristallografii AN SSSR (Institute of Crystallography of the AS USSR). Fig. 3 shows the measured temperature dependence of the resonance field for polycrystalline (1) and monocrystalline specimens (2). The results obtained

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MALEVSKAYA, L.A.

PHASE I BOOK EXPLOITATION SOV/4893

Vsesoyuznoye soveshchaniye po fizike, fiziko-khimicheskim svoystvam ferritov i fizicheskim osnovam ikh primeneniya. 3d, Minsk, 1959

Ferrity; fizicheskiye i fiziko-khimicheskiye svoystva. Doklady (Ferrites; Physical and Physicochemical Properties. Reports) Minsk, Izd-vo AN BSSR, 1960. 655 p. Errata slip inserted. 4,000 copies printed.

Sponsoring Agencies: Nauchnyy sovet po magnetizmu AN SSSR. Otdel fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: N. N. Sirota, Academician of the Academy of Sciences BSSR; K. P. Belov, Professor; Ye. I. Kondorskiy, Professor; K. M. Polivanov, Professor; R. V. Telesnin, Professor; G. A. Smolenskiy, Professor; N. N. Shol'ts, Candidate of Physical and Mathematical Sciences; E. M. Smolyarenko; and L. A. Bashkirov; Ed. of Publishing House: S. Kholyavskiy; Tech. Ed.: I. Volokhanovich.

PURPOSE: This book is intended for physicists, physical chemists, radio electronics engineers, and technical personnel engaged in the production and use of ferromagnetic materials. It may also be used by students in advanced courses in radio electronics, physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-Union Conference on Ferrites held in Minsk, Belorussian SSR. The reports deal with magnetic transformations, electrical and galvanomagnetic properties of ferrites, studies of the growth of ferrite single crystals, problems in the chemical and physicochemical analysis of ferrites, studies of ferrites having rectangular hysteresis loops and multicomponent ferrite systems exhibiting spontaneous rectangularity, problems in magnetic attraction, highly coercive ferrites, magnetic spectroscopy, ferromagnetic resonance, magneto-optics, physical principles of using ferrite components in electrical circuits, anisotropy of electrical and magnetic properties, etc. The Committee on Magnetism, AS USSR (S. V. Vonsovskiy, Chairman) organized the conference. References accompany individual articles.

Ferrites (Cont.) SOV/4893

Card 8/18

Card 8/18

The Magnetic- and Resonance Properties of the Ferrite Granates of Yttrium in the Substitution of Fe^{3+}-Ions by Cr^{3+}- and Al^{3+}-Ions

SOV/56-36-5-66/76

The ratios found agree qualitatively with the theory developed by Clogston et al. (Ref 4), i. e. that ΔH is proportional to $V\overline{\sigma_o}$ and θ. There are 2 figures and 4 references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: February 12, 1959

Card 3/3

resonance-characteristics were carried out on crystalline samples (sintering in air at 1300°C for 4 hours, density 2.75 g/cm^3). Figure 1 shows the connection between a and the saturation magnetization σ_o as well as between a and Curie point θ in the range $0 \leq a \leq 1$. All four curves (σ_o, θ for Al^{3+} and Cr^{3+}) show a more or less steep decline with increasing a, with the exception of the chromium-substituted sample which shows an incline at $a < 0.5$ for σ_o. Figure 2 shows the results obtained by measurements of the width of the absorption lines ΔH. With increasing a there is an increase of ΔH for the chromium-substituted sample, and a decrease for the Al-substituted sample. For the former the g-factor increases from 2.150 ± 0.005 (unsubstituted sample) to 2.200 ± 0.005, in the case of the latter it increases to 2.030 ± 0.005.

24(2), 24(3)

AUTHORS: Belov, K. P., Zaytseva, M. A., Malevskaya, L. A.

SOV/56-36-5-66/76

TITLE: The Magnetic- and Resonance Properties of the Ferrite Garnets of Yttrium in the Substitution of Fe^{3+}-Ions by Cr^{3+}- and Al^{3+}-Ions (Magnitnyye i rezonansnyye svoystva ferritov-granatov ittriya pri zameshchenii ionov Fe^{3+} ionami Cr^{3+} i Al^{3+})

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 5, pp 1602-1603 (USSR)

ABSTRACT: The present "Letter to the Editor" is in close connection with the preceding one (pp 1600-1601). The present letter deals mainly with the investigation of the influence exerted by foreign ions on the physical character. The stoichiometric compound $3Y_2O_3 \cdot 5Fe_2O_3$ is conveyed to $3Y_2O_3 \cdot (5-a)Fe_2O_3 \cdot aAl_2O_3$ and $3Y_2O_3 \cdot (5-a)Fe_2O_3 \cdot aCr_2O_3$ respectively by the substitutions. a denotes the content of Al^{3+} and Cr^{3+} ions. Measurements of the magnetic- and

Card 1/3

On the Temperature Dependence of Ferromagnetic Resonance in Yttrium-ferrite-garnets

SOV/56-36-5-65/76

third ferrite investigated was found to be practically independent of temperature with respect to H_p and the g-factor within the range of between 50 and 250° C. This work was carried out under the supervision of K. P. Belov. There are 3 figures and 2 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: February 12, 1959

Card 3/3

$3Y_2O_3 \cdot 4Fe_2O_3 \cdot Al_2O_3$ and $3Y_2O_3 \cdot 4.5\ Fe_2O_3 \cdot 0.5\ Cr_2O_3$. In the case of an approach to Curie point, the spontaneous magnetization σ_s develops much more steeply than ΔH. In the case of the first-mentioned stoichiometric ferrite, decrease is also more rapid than in the case of the "substituted" ferrites; the higher the Al^{3+} and Cr^{3+} content, the greater is the slope of the ΔH- and σ_s-curves in comparison to the ferrite without these impurity ions. Figure 2 shows the dependence of ΔH on $\sqrt{\sigma_s}$; it is found that at a greater distance from Curie point the curves develop in conformity with the theory developed by Clogston, Suhl et al. (Ref 2). Figure 3 finally shows the temperature dependence of the resonance field H_p and of the g-factor. Stoichiometric ferrite and ferrite containing Cr^{3+} show an increase with respect to H_p in the case of approach to Curie point, and with respect to the g-factor they decrease. The

24(2), 24(3)

AUTHORS: Malevskaya, L. A., Nurmukhamedov, G. M. SOV/56-36-5-65/76

TITLE: On the Temperature Dependence of Ferromagnetic Resonance in Yttrium-ferrite-garnets (O temperaturnoy zavisimosti ferromagnitnogo rezonansa v ferritakh-granatakh ittriya)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 5, pp 1600-1601 (USSR)

ABSTRACT: In the present "Letter to the Editor" the authors give the results obtained by investigations of the temperature dependence of the width of lines of ferromagnetic resonance absorption, of the g-factor, and of the resonance field in polycrystalline ferrite-garnets of yttrium, in which the Fe^{3+}-ions were partly substituted by Al^{3+} and Cr^{3+}. At the same time, the authors measured the temperature dependence of spontaneous magnetization according to a method which has been described in an earlier paper (Ref 1). Figure 1 shows the course of the temperature dependence of the absorption line width ΔH and of the specific spontaneous magnetization of the following compounds: $3Y_2O_3 \cdot 5Fe_2O_3$,

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ACCESSION NR: AP4034061

to paramagnetism (here the value of the Young's modulus decreased); 2) a region corresponding to a transition from ferromagnetism to antiferromagnetism (here the Young's modulus fell significantly); 3) a region between these two temperatures which corresponded to the helicoidal antiferromagnetic structure (here the Young's modulus increased faster than in the paramagnetic region as the temperature was decreased). Orig. art. has: 2 figures.

ASSOCIATION: Moskovskiy gosuniversitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 13Jul63 ENCL: 00

SUB CODE: SS, MM NO REF SOV: 004 OTHER: 003

Card 2/2

ACCESSION NR: AP4034061 S/0126/64/017/004/0617/0619

AUTHORS: Belov, K. P.; Levitin, R. Z.; Malevskaya, L. A.; Sokolov, V. I.

TITLE: Anomalies of Young's modulus in rare earth ferromagnets

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 4, 1964, 617-619

TOPIC TAGS: rare earth, ferromagnet, Young modulus, dysprosium, erbium, holnium, thulium, helicoidal ferromagnetic structure, paramagnetism

ABSTRACT: Rare earth ferromagnets (Dy, Er, Ho, Tb, Tu, and possibly Gd) at certain temperature intervals possess antiferromagnetic helicoidal structures. To investigate the reasons for the formation of these structures, the Young's modulus was measured at various temperatures. A compound vibrator was used at a frequency of 150 kilocycles/sec, and the temperature was changed continuously from 4.2 to 78K by placing the specimen in a massive copper vessel which could be cooled down to a temperature near that of liquid helium. Further variation of temperature between 78 and 300K was obtained by using liquid nitrogen and an electric heater. The magnetization was measured by means of an oscillating magnetometer. The results showed three regions in which anomalous behavior of the Young's modulus could be observed: 1) a region around which a transition took place from antiferromagnetism

Card 1/2

MALEVSKAYA, I.A.; BOKINA, A.I.

Change in some physiolcgical indices on the water-salt metabolism in adolescents continuously drinking highly mineralized water. Biul. eksp. biol. i med. 53 no.1:17-21 Ja '62. (MIRA 15:3)

1. Iz fiziologicheskoy laboratorii (zav. - doktor biologicheskikh nauk I.S. Kandror) Instituta obshchey i kommunal'noy gigiyeny (dir. - prof. N.N. Litvinov) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Parinym.

(WATER METABOLISM)
(BALTIC REGION--MINERAL WATERS)
(SALT IN THE BODY)

MALEVSKAYA, I.A., kand.med.nauk

Water, raw and boiled. Zdorov'e 8 no.4:31 Ap '62. (MIRA 15:4)
(DRINKING WATER)

MALAVSKAYA-MALAVICH, I.A., Cand Med Sci -- (diss) "Data for the substantiation of the hygienic norm of chlorine-ion and sulfochloride complex in drinking water." Mos, 1959. 18 pp (Acad Med Sci USSR). 200 copies. List of author's works at end of text (10 titles)

(KL,37-59, 111)

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MALEVSKAYA, I.A., aspirant

Studies for determining permissible concentrations of chlorides and a chloride-sulfate complex in drinking water [with summary in English]. Gig. i san. 23 no.4:11-17 Ap '58. (MIRA 11:6)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni A.N.Sysina AMN SSSR.

(CHLORIDES, eff.
in drinking water, on gastric secretion in dogs (Rus))
(SULFATES, eff.
cholride-sulfate mixtures in drinking water, on gastric secretion in dogs (Rus))
(GASTRIC JUICE,
secretion eff. of chlorides & chloride-sulfate complex in dirinking water (Rus))

MALEVSKA, KARNAUCHOVA

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and Their Application. Cellulose and Cellulose Products. Paper. H-33

Abs Jour : Ref. Zhur. Khimiya, No 3, 1958, 9985

Author : Malevska, Karnauchova

Inst : Not given

Title : The Effect of Spruce Wood Aging on Rosin Properties.

Orig Pub : Papir a celulosa, 1955, 10, No 12, 265-266

Abstract : See translation in RZhKhim, 1956, 17748

Card 1/1

MALEVITSKAYA, M.A.

"Mixed" diseases of carp on fish farms of the Ukrainian S.S.R.
Trudy sov.Ikht.kom. no.9:53-56 '59. (MIRA 13:5)

1. Nauchno-issledovatel'skiy institut prudovogo i ozerno-rechnogo rybnogo khozyaystva USSR.
(Ukraine--Carp--Diseases and pests)

On the Importation of Bothriocephalus Gowkongensis Yen, 1955, a Parasite Possessing a Complex Development Cycle, in the Course of Acclimatization of Fishes From the Amur River

SOV/20-123-3-54/54

found in the carp. There, 1 year old White Amurs and tolstolobiks had been previously imported. The necessity of adhering to the prophylactic directions in fish importation is stressed. Yu. K. Petrushevskiy assisted in this work, the determination of the parasite was carried out by O. N. Bauer and M. N. Dubinina. There are 2 figures and 7 references, 5 of which are Soviet.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva (Ukrainian Scientific Research Institute of Fisheries)

PRESENTED: July 14, 1958, by Ye. N. Pavlovskiy, Academician

SUBMITTED: July 10, 1958

Card 4/4

USCOMM-DC-61,122

a repeated infection is possible. In the case of mass infection, the development of both the host-fish and the parasite is inhibited. The fishes suffer from a) loss in weight, b) a malignant anaemia with a rapidly dropping number of erythrocytes and c) a chronic enteritis. Two further fish species are quoted as hosts (in China). As intermediate host fresh-water Cyclops became known: Mesocyclops leuckarti, Thermocyclops taihokuensis and Ectocyclops phaleratus medius. The infection of the fishes imported from the Amur river into the Ukraina was overlooked because only adult individuals of the White Amur and of tolstolobik (which can also be infected) had been investigated. Especially the young fishes could have been infected. B.gowkongensis was not found in the Amur river probably for the same reason. In the ponds of the district Kiyev the first and the last species of the crustaceans mentioned is existing. In another experimental fish culture institute (of the institute mentioned under "Association") "Nivki" the tapeworm was not

On the Importation of Bothriocephalus Gowkongensis Yen, 1955, a Parasite Possessing a Complex Development Cycle, in the Course of Acclimatization of Fishes From the Amur River

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been recorded for the breeding carp (Fig 1). Young fishes of "White Amur" (Ctenopharyngodon idella), tolstolobik (Hypophthalmichthys molitrix) and zmeyegolov (Ophiocephalus argus warpachowskii) were previously imported in the ponds of the mentioned village from the Amur River (Khabarovsk). This fact gave rise to the assumption of an eastern origin of the found parasite. It was the species mentioned in the title (Ref 6) that was described from the intestine of this year's fishes of the White Amur from the region of Kanton. The author summarizes the present data on the parasite from references 6 and 7. In Southern and North China, this parasite causes a high mortality among the White Amur in fish culture institutes. The young fishes are attached by the parasite by 20 up to 100%. Up to 457 tapeworms may occur in a young fish. Fishes of a length of 80 mm most commonly die. From 100 mm length on the infection decreases. In fishes older than one year the tapeworm is but rarely occurring. The infection which is overcome does not cause immunity, thus

Card 2/4

17(15)

AUTHOR: Malevitskaya, M. A. SOV/20-123-3-54/54

TITLE: On the Importation of Bothriocephalus Gowkongensis Yen, 1955, a Parasite Possessing a Complex Development Cycle, in the Course of Acclimatization of Fishes From the Amur River (O zavoze parazita so slozhnym tsiklom razvitiya, Bothriocephalus gowkongensis Yen, 1955, pri akklimatizatsii amurskikh ryb)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 3, pp 572-575 (USSR)

ABSTRACT: Numerous cases are known of importation of parasites with a direct development in the transplantation of fishes into new waters. These parasites sometimes reproduce in enormous quantities in the new waters and frequently are even able to adapt to new species of hosts (Refs 1-3). Only little cases, however, are recorded regarding an importation of parasites with a complex development cycle (Ref 5). The author detected a similar case. In October 1957, she found during the dissection of 6 this year's carps, 7-11 cm long (Kolkhoz imeni Zhdanov, Village of Zdorovok, environment of the town of Vasil'kov, oblast of Kiyev) a tapeworm which as yet had not

Card 1/4

Data for the Study of Parasites (Cont.)

group was more numerous than any other fish parasite group; this is explained by the abundance of aquatic invertebrates which act as intermediate hosts, and of piscophagous birds. Certain fish parasite larvae can be dangerous to man, to the carnivorous and to the omnivorous animals. These larvae are Metagonimus yokogawai of the Neterophydae group, and also various species of the Opisthorcidae group. Fish which have been infested with parasite larvae may infect birds, commercial mammals and even man. Parasitological studies have shown that the scavenger fish of the **Konskaya and Bazavluk backwaters** on the Lower Dnepr were badly infested with the types of parasites which can also infest commercial types. This situation creates conditions dangerous for the latter.

N. K. K.

Card 2/2

MALEVITSKAYA, M. A.

14-57-6-12757

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6, p 137 (USSR)

AUTHORS: Malevitskaya, M. A., Lopukhina, A. M.

TITLE: Data for the Study of Parasites of Fish in the Lower Dnepr (Materialy k izucheniyu parazitov ryb nizhnego Dnepra)

PERIODICAL: Tr. N.-i. in-ta prud. i oz.-rech. ryb. kh-va UkrSSR, 1955, Nr 10, pp 40-49

ABSTRACT: Parasites of 11 classes were counted during a study of fish in the Lower Dnepr. The most common types were digenetic trematodae (37 species). Multigenetic trematodae (30 species) were less common. Of a special interest were Philometra sanguinea found on the tail fins of crucian carp (54.5 percent), and Philometra obturans found in the blood stream of pike. Samples collected during this study showed that the trematodae

Card 1/2

CHECHINA, A.S.;MALEVITSKAYA, M.A.;KONONOVA, N.Ye.

Effect of acclimatization of Ameiurus nebulosus on its parasites. Doklady Akad. nauk SSSR 88 no. 1:173-175 1 Jan 1953. (CLML 24:1)

1. Presented by Academician K. I. Skryabin 5 November 1952. 2. Scientific-Research Institute of the Pond, Lake, and River Fish Industry of the Ukrainian SSR and the Belorussian Division of VNIORKh.

MALEVISTSKAYA, M. A.

Malevistskaya, M. A. "Material for the study of parasitic worms of the family Dactylogyridae in Dnepr fish", Trudy Nauch.-issled. in-ta prudovogo i ozerno-rech. ryb. khoz-va, No. 6, 1949, p. 27-41, - Bibliog: 26 items.

SO: U-4392, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No 21, 1949).

MALEVITSKAYA, MARIA

"New Dactylogy Rus-Varieties (Trematoda) from the Dnieper,"

SO: Dok. AN, 30, No. 3, 1941. Mbr., Zoological Inst., Dept. Biol. Sci., Acad. Sci, -1941-.

MALEVINSKIY, Yu.

Automatic clock- and watchmakers. IUn.tekh. 5 no.7:22-25 Jl '61. (MIRA 15:1)

(Clockmaking and watchmaking)
(Automatic control)

MALEVINSKIY, G.V., inzh.; RINKUS, E.K.

Protection of a regenerative air heater from the ignition of the deposits. Teploenergetika 12 no.1:18-22 Ja '65.
(MIRA 18:4)

1. Vsesoyuznyy teplotekhnicheskiy institut.

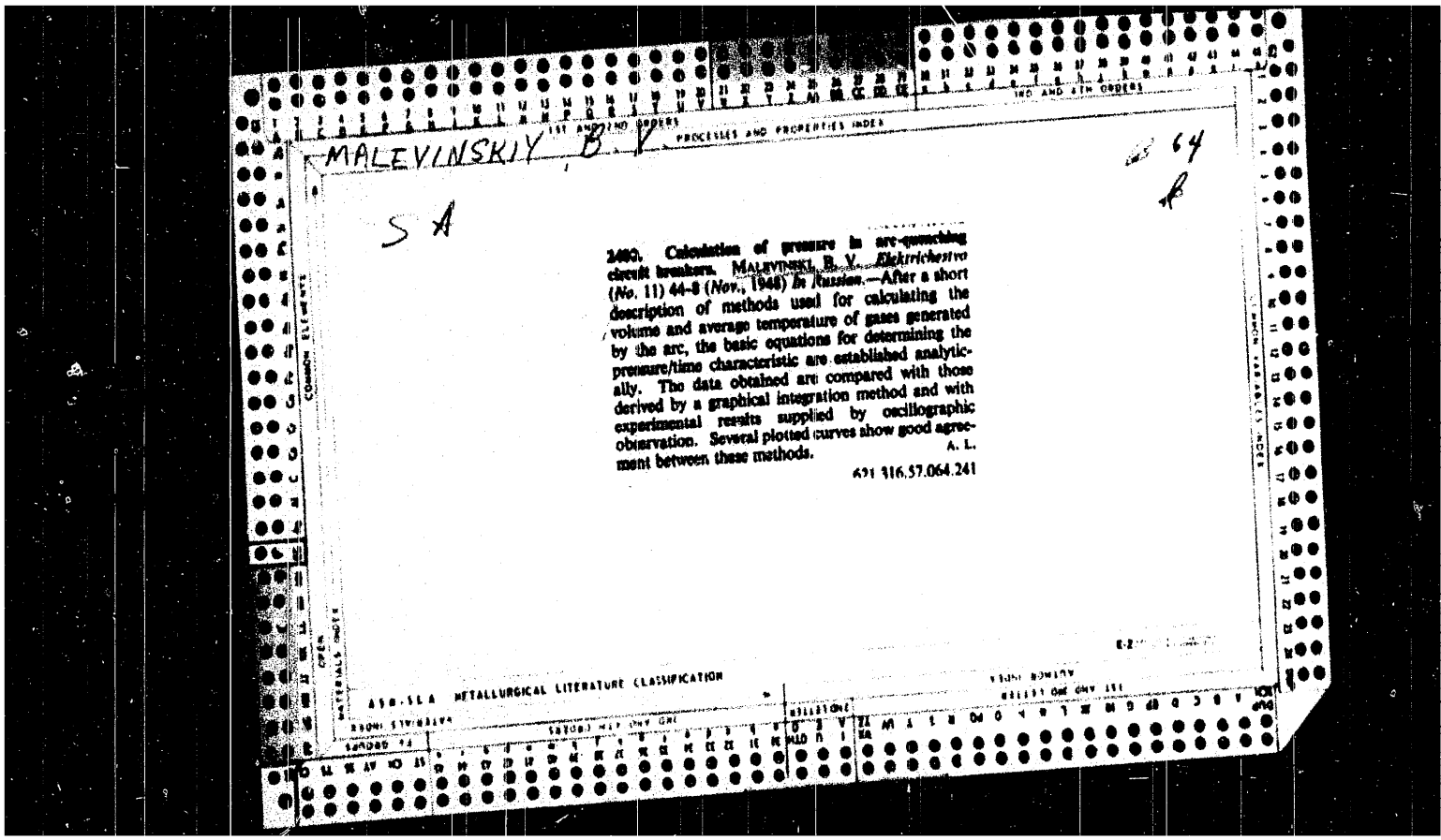
MALEVINSKIY, G. V., inzh.

Layout for the automation of an once-through-tupe boiler operating in a block with a 200 Mx. turbogenerator. Energetik 10 no.8:9-10 Ag '62. (MIRA 15:10)

(Boilers) (Turbogenerators)

MALEVINSKIY G.V., inzh.

Increase in the accuracy of a position indicating device. Energetik 10 no.5:17-18 My '62. (MIRA 15:5)
(Servomechanisms)



MALEVINSKIY, B. V.

S A

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2480. Calculation of pressure in arc-quenching circuit breakers. MALEVINSKI, B. V. *Elektrichestvo* (*No.* 11) 44-8 (*Nov.*, 1948) *In Russian.*—After a short description of methods used for calculating the volume and average temperature of gases generated by the arc, the basic equations for determining the pressure/time characteristic are established analytically. The data obtained are compared with those derived by a graphical integration method and with experimental results supplied by oscillographic observation. Several plotted curves show good agreement between these methods.

A. L.

621.316.57.064.241

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MALEVINSKIY, B. V., Engr. Cand. Tech. Sci.

Dissertation: "Investigation of Pressure in the Arc-Quenching Mechanisms of High-Voltage Current Breakers." Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, 28 Feb 47.

SO: Vechernyaya Moskva, Feb, 1947 (Project #17836)

measured under isothermal conditions at an air temperature from 18-25°C. The data were correlated in dimensionless form by the expression

$$Eu = C\,Re^{-n}, \qquad (1)$$

where $Eu = \Delta P / w^2$ is the Euler number; $Re = wL/\nu$ is the Reynolds number; ΔP is the drop in the statistical pressure in the section occupied by the finned surface, newtons/m^2; w is the flow velocity in the transverse axis of the cross section of the finned tube, meters/sec; L is the determining geometric dimension, meters; ρ and ν are the density and the coefficient of the kinematic viscosity or the air, respectively, kg/m^3 and m^2/sec; C and n are constants, determined experimentally. The article arrives at an empirical expression for the aerodynamic resistance for finned tubes in the following form:

$$Eu = 0,7\left(\frac{\Delta}{d}\right)^{-0,65} Re^{-0,16}. \qquad (2)$$

Orig. art. has: 2 formulas, 3 figures and 2 tables.

SUB CODE: 20/ SUBM DATE: 02Feb66/ ORIG REF: 006/ OTH REF: 001

L 04815-67 EWP(m)/EWP(k)/EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AP6025426 (N) SOURCE CODE: UR/0143/66/000/007/0116/0120

AUTHOR: Malevich, Yu. A. (Engineer); Legkiy, V. M. (Candidate of technical sciences)

ORG: Lenin Polytechnic Institute, Kiyev (Kiyevskiy ordena Lenina politekhnicheskiy institut)

TITLE: Aerodynamic resistance of single finned tubes in a transverse flow of air

SOURCE: IVUZ. Energetika, no. 7, 1966, 116-120

TOPIC TAGS: aerodynamic theory, metal tube

ABSTRACT: The article gives the results of an experimental investigation of the aerodynamic resistance of 62 single tubes with transverse flat fins. The experiments were made in an open aerodynamic tube. To the inlet section with a diameter of 0.14 meters there was connected a transition section which transformed the cylindrical section into a rectangular section with dimensions of 0.14 x 0.71 meters. The blower developed a pressure up to 2000 newtons/m^2, and had a capacity up to 500 m^3/hr. Six different working sections were used in the tests; their dimensions are shown in a table. The aerodynamic resistance was

Card 1/2

UDC: 532.501.312:532.542

MALEVICH, Ye.S., Doc Med Sci -- (diss) "The use of autografts and ~~mandibula from a corpse~~ (a cadaver's) mandibula for replacement of defects in humans." Dnepropetrovsk, 1959. 24 pp (Kiev Order of Labor Red Banner Med Inst im Acad A.A. Bogomolets). 250 copies. List of author's works at end of text (10 titles) (KL,38-59, 119)

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MALEVICH, Ye.S., dotsent; PALISHEVSKIY, Yu.A.

Clinical importance of anatomical and surgical features of the terminal branch of the facial nerve. Stomatologiia 35 no.1:30-33 Ja-F '56. (MLRA 9:6)

1. Iz kafedry gospital'noy khirurgii (zaveduyushchiy zasluzhennyy deyatel' nauki professor T.Ye.Gnilorybov) i kafedry operativnoy khirurgii i topograficheskoy anatomii (zaveduyushchiy professor Ya.A.Rotenberg) Dnepropetrovskogo meditsinskogo instituta.
(JAWS--SURGERY) (FACIAL NERVE)

MALEVICH, YE. S.

"The Problem of Traumatic Facial Scars,"

SO: Stomatologiya, No. 1,1949. Docent, Chair of Hospital Surgery, Dnepropetrovsk Med. Inst. and the Oblast Hospital for War Casualties, -c1949-.

MALEVICH, YE. S.

"Actinomycosis of the Maxillofacial Region,"

SO: Stomatologiya, No. 2, 1948. Chair of Maxillofacial Surg., Kiev for Advancement of Physicians," -c1948-.

MALEVICH, Ye. K.

"Research on stress in stiff solid sluice and dry docks."

Dissertation for Candidate of Technical Sciences, Leningrad Inst. of Water Transport Engineering (LIIVT)

Subject: Hydroengineering building and construction

Gidrotekhnicheskoye, stroitel'stvo, 12, 1946.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700001-6

UMANSKIY, G.I., prof.; MALEVICH, V.P.

Papillary and verrucoid psoriasis. Sovet. med. 23 no.2:137-138 F '59. (MIRA 12:3)

1. Iz bol'nitsy (glavnyy vrach B.L. Revzin) st. Presnya Moskovskoy okruzhnoy zheleznoy dorogi.
(PSORIASIS, case reports
papillary & verrucoid (Rus))

MALEVICH, T.L. (Leningrad)

Some properties of estimations of the spectrum of a stationary process. Teor. veroiat. i ee prim. 10 no.3:500-509 '65.
(MIRA 18:9)

MALEVICH, T.L. (Tashkent)

Asymptotic behavior of the estimate of the spectral function for a stationary Gaussian process. Teor. veroiat. i ee prim. 9 no.2:386-390 '64 (MIRA 17:7)

1. Institut Matematiki imeni V.I. Romanovskogo AN Uzbekskoy SSR.

MALEVICH, T.L.

Determining the spectrum of a Gaussian process in linear regression series. Izv. AN Uz. SSR. Ser. fiz.-mat. nauk 8 no.6:30-37 '64. (MIRA 18:3)

1. Institut matematiki imeni Romanovskogo AN UzSSR.

MALEVICH, T.L.

Asymptotic destribution of statistics related to the estimation of the spectrum of a stationary process. Teor. veroiat. i mat. stat. no.1:77-99 '64. (MIRA 18:6)

ROMANOVSKIY, V.I., akademik; SARYMSAKOV, T.A., akademik, otv. red.; DIVEYEV, R.Kh., red.; NAGAYEV, S.V., red.; MALEVICH, T.L., red.; RONZHIN, V.I., red.; EYDEL'NANT, M.I., red.; KISELEVA, V.N., red.; GOR'KOVAYA, Z.P., tekhn. red.

[Mathematical statistics] Matematicheskaia statistika. Tashkent, Izd-vo Akad. nauk UzSSR, Book 2. [Operational methods of mathematical statistics] Operativnye metody matematicheskoi statistiki. 1963. 794 p. (MIRA 16:5)

1. Akademiya nauk Uzbekskoy SSR (for Romanovskiy, Sarymsakov). 2. Otdel teorii veroyatnostey i matematicheskoy statistiki Instituta matematiki im. V.I.Romanovskogo Akademii nauk Uzbekskoy SSR (for Diveyev, Nagayev, Malevich).
(Mathematical statistics)

MALEVICH, O.A.

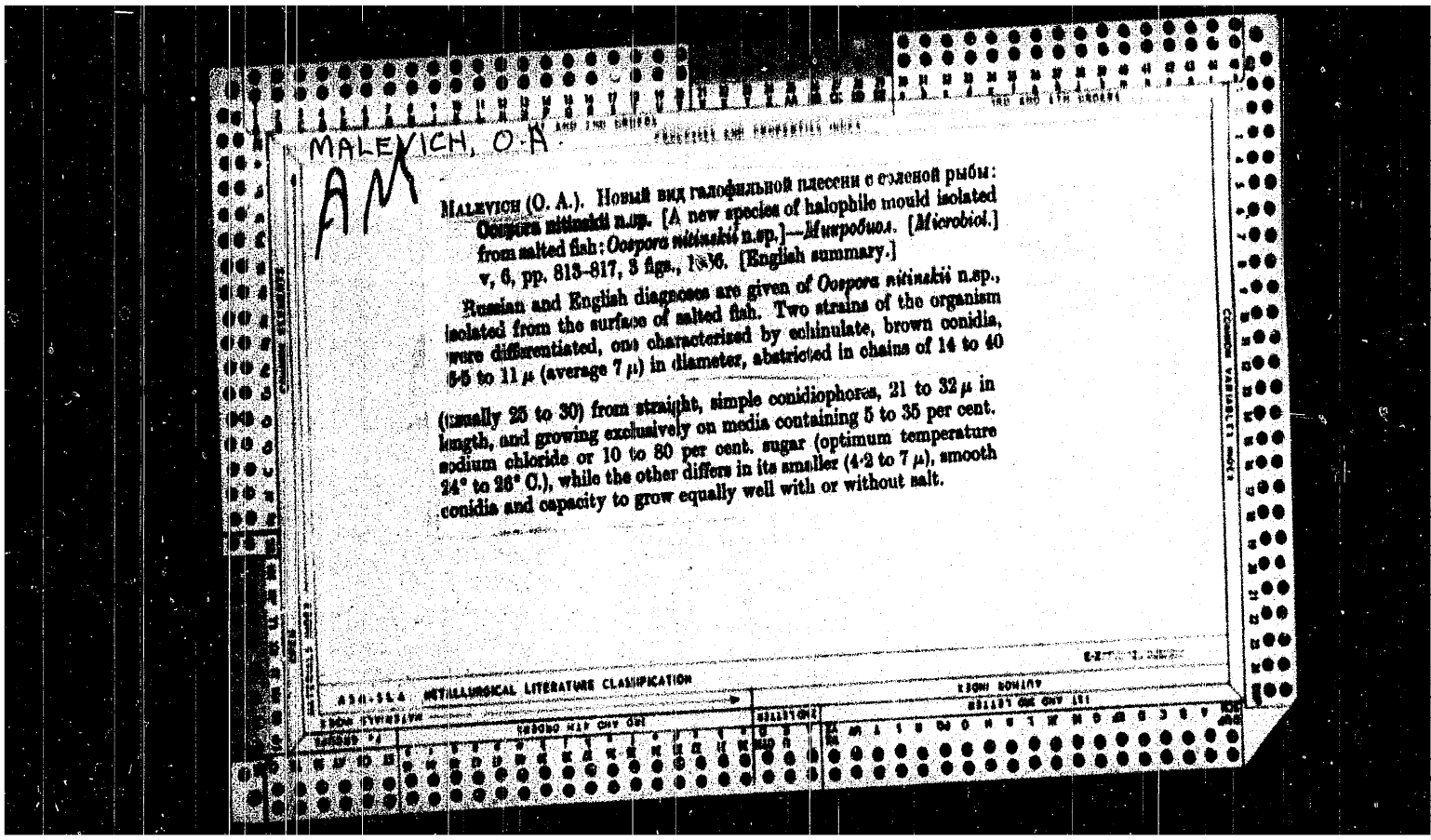
Malevich,O.A. and Sirotkina, T.D. "Accelerated method for the determination of intestinal bacilli in food products," Sbornik nauch. rabot (Nauch.-issled. in-t torgovli i obshchestv. pitaniya), Moscow, 1949, p. 219-30, Bibliog: 34 items

SO: U-5241- 17 December 1953, (letopis 'zhurnal 'nykh Statey, No. 26, 1949).

TROFIMOVA, V.I.; SHTENYMAN, R.A.; SHAPIRO, M.S.; MALEVICH, O.A.; ODINTSOV, A.I.; GROZNOV, S.R.; RYBAK, I.A.; SHORIN, G.F.; BELYAKOV, K.M.; SIDOROV, V.A.; VOYTINSKAYA, S.Ye.; DUNTSOVA, K.G.; KHRUSTALEVA, O.N.; CHERVYAKOVA, L., red.; BABICHEVA, V.V., tekhn.red.

[Manual on technological advice and technical specifications for semiprocessed products and dishes of meat, poultry, fish, potatoes, and vegetables] Sbornik tekhnologicheskikh instruktsii i tekhnicheskikh uslovii na polufabrikaty i kulinarnye izdeliia iz miasa, ptitsy, ryby, kartofelia i ovoshchei. Moskva, Gos.izd-vo torg. lit-ry, 1958. 101 p. (MIRA 13:4)

1. Russia (1923- U.S.S.R.).Ministerstvo torgovli.
(Food industry) (Cookery)



MALEVICH, O.A.

AM

MALEVICH (O. A.). Новый вид галофильной плесени с соленой рыбы: *Oospora nitinskii* n.sp. [A new species of halophile mould isolated from salted fish: *Oospora nitinskii* n.sp.]—*Микробиол.* [*Microbiol.*] v, 6, pp. 813–817, 3 figs., 1936. [English summary.]

Russian and English diagnoses are given of *Oospora nitinskii* n.sp., isolated from the surface of salted fish. Two strains of the organism were differentiated, one characterised by echinulate, brown conidia, 6·5 to 11 μ (average 7 μ) in diameter, abstricted in chains of 14 to 40 (usually 25 to 30) from straight, simple conidiophores, 21 to 32 μ in length, and growing exclusively on media containing 5 to 35 per cent. sodium chloride or 10 to 80 per cent. sugar (optimum temperature 24° to 26° C.), while the other differs in its smaller (4·2 to 7 μ), smooth conidia and capacity to grow equally well with or without salt.

METALLURGICAL LITERATURE CLASSIFICATION

RAPOPORT, Pavel Isaakovich, inzh.; MALEVICH, N.A., nauchn. red.

[Mine cars and electric locomotives] Rudnichnye vagonetki i elektrovozy. Moskva, TSentr. nauchno-issl. in-t patentnoi informatsii i tekhniko-ekon. issledovanii, 1964. 40 p. (MIRA 18:8)

MALEVICH, N.A., doktor tekhn. nauk

Basic trends in the improvement of equipment complexes for shaft sinking by the boring and blasting method. Shakht. stroi. 9 no.3:1-4 Mr '65. (MIRA 18:7)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut podzemnogo shakhtnogo stroitel'stva.

MIKHALENKOV, S.P.; STEPANOV, M.A.; SHAVKUN, B.I.; MALEVICH, N.A., doktor tekhn. nauk, prof., red.

[Mining machinery and equipment] Gornoprokhodcheskie mashiny i oborudovanie. Pod red. N.A.Malevicha. Moskva, 1962. 147 p. (MIRA 16:7)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut podzemnogo i shakhtnogo stroitel'stva. (Mining machinery)

MALEVICH, N.A., doktor tekhn.nauk; KUKLIN, A.I., kand.tekhn.nauk;
BRAUN, I.V., inzh.

"Means of controlling water in potassium and salt mines" by
N.G. Trupak. Reviewed by N.A. Malevich, A.I. Kuklin, and
I.V. Braun. Shakht. stroi. 6 no.6:30-31 Je '62. (MIRA 15:6)
(Mine water)
(Trupak, N.G.)

MALEVICH, N.A., doktor tekhn.nauk

Designing underground electromotive transportation systems.
Ugol' 36 no.6:33-36 Je '61. (MIRA 14:7)
(Mine railroads)

MONIN, G.I.; MALEVICH, N.A.; VAGIN, G.I.

"Boring and blasting operations in mining" by E.O.Mindeli. Reviewed by G.I.Monin, N.A.Malevich, G.I.Vagin. Gor.zhur. no.2:80 F '61. (MIRA 14:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut Rodzemshakhtostroy (for Monin, Malevich). 2. Krivbassshakhtoprokhodka (for Vagin).

(Boring) (Blasting) (Mindeli, E.O.)

KOROBOV, P.I.; KHLEBNIKOV, V.B.; BORISOV, A.F.; SKOCHINSKIY, A.A.; SHEVYAKOV, L.D.; MEL'NIKOV, N.V.; MELESHKIN, G.M.; MOSKAL'KOV, Ye.F.; POKROVSKIY, M.A.; KAPLUNOV, R.P.; BOGOLYUBOV, B.P.; ARUTYUNOV, N.B.; BOYKO, V.Ye.; BRYNZA, N.M.; FEDOROV, V.F.; AGOSHKOV, M.I.; BARONENKOV, A.V.; VORONIN, L.N.; IPATOV, P.M.; NAZAROV, P.P.; SLUTSKAYA, O.M.; CHERNENKO, N.B.; RABINOVICH, V.I.; [illegible]VSKIY, V.N.; TROITSKIY, A.V.; GOL'DIN, Ya.A.; DZHAPARIDZE, Yo.A.; ZHURAVLEV, S.P.; KUZNETSOV, K.K.; MALEVICH, N.A.; MARINENKO, M.P.; [illegible]MTYNOV, G.P.; NATAROV, P.F.; PERTSEV, M.A.; ROSSMIT, A.F.; [illegible]YASHOV, A.A.; SOSEDOV, O.O.; VI[illegible]ADOV, V.S.; ZUBAREV, S.N.; SHAFARENKO, I.F.

Nikolai Nikolaevich Patrikeev; an obituary. Gor.zhur. no.6:76 Je '60. (MIRA 14:2)

(Patrikeev, Nikolai Nikolaevich, 1890-1960)